

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: 1 December 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 30.11.2023.

महोदय/Dear Sir,

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

धन्यवाद,

Report for previous day

Date of Reporting: 01-Dec-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 19:00 hrs; from RLDCs)	46957	52688	45107	20027	2606	167385
Peak Shortage (MW)	0	0	0	144	0	144
Energy Met (MU)	1019	1190	1020	430	47	3706
Hydro Gen (MU)	106	38	34	19	12	209
Wind Gen (MU)	7	68	56	-	-	130
Solar Gen (MU)*	90.64	47.24	96.04	2.91	1.16	238
Energy Shortage (MU)	0.47	0.00	0.00	1.03	0.00	1.50
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	50853	57164	48466	21894	2787	177582
Time Of Maximum Demand Met	18:30	09:22	09:23	17:35	17:19	18:17

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	0.044	0.00	0.00	5.25	5.25	71.87	22.88

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	6867	0	130.2	47.0	-0.5	185	0.00
	Haryana	7142	0	136.6	98.5	-0.5	192	0.00
	Rajasthan	14047	0	266.5	122.5	-4.9	182	0.00
	Delhi	3784	0	69.5	60.8	-0.6	229	0.00
	UP	16116	0	280.4	111.1	-3.0	810	0.00
	Uttarakhand	2040	0	39.2	30.7	-0.1	91	0.00
	HP	1900	5	34.1	26.8	-0.1	79	0.05
	J&K(UT) & Ladakh(UT)	2542	0	54.9	50.8	-1.0	180	0.42
	Chandigarh	185	0	3.5	3.6	-0.1	40	0.00
Railways NR ISTS	182	0	3.7	3.7	0.1	27	0.00	
WR	Chhattisgarh	4224	0	87.2	49.1	0.2	406	0.00
	Gujarat	16194	0	335.2	154.8	-0.2	750	0.00
	MP	11458	0	214.1	123.4	-4.1	450	0.00
	Maharashtra	23042	0	479.7	188.8	-0.5	563	0.00
	Goa	711	0	15.4	13.6	1.2	74	0.00
	DNHDDPDCL	1200	0	27.8	27.7	0.1	63	0.00
	AMNSIL	801	0	17.9	6.7	-0.3	240	0.00
	BALCO	524	0	12.5	12.5	0.0	9	0.00
SR	Andhra Pradesh	9734	0	199.6	79.2	-0.5	585	0.00
	Telangana	8795	0	183.0	81.5	-0.5	452	0.00
	Karnataka	13427	0	249.8	105.0	-1.5	641	0.00
	Kerala	4245	0	85.3	71.6	1.0	228	0.00
	Tamil Nadu	14907	0	294.3	168.7	-1.7	415	0.00
	Puducherry	374	0	8.3	8.0	-0.4	37	0.00
ER	Bihar	4562	0	84.3	79.0	-0.7	217	0.00
	DVC	3391	0	71.3	-35.7	0.8	337	0.00
	Jharkhand	1582	108	30.3	23.2	-1.0	143	1.03
	Odisha	5082	0	107.2	32.5	-1.9	437	0.00
	West Bengal	7123	0	134.9	22.1	-2.8	88	0.00
	Sikkim	100	0	1.6	1.5	0.1	41	0.00
Railways ER ISTS	13	0	0.2	0.1	0.1	12	0.00	
NER	Arunachal Pradesh	169	0	2.9	2.4	0.4	53	0.00
	Assam	1608	0	26.5	20.8	-0.8	123	0.00
	Manipur	205	0	2.9	2.8	0.1	41	0.00
	Meghalaya	345	0	6.6	5.0	-0.1	52	0.00
	Mizoram	140	0	2.0	1.8	-0.1	8	0.00
	Nagaland	156	0	2.4	2.3	-0.1	25	0.00
Tripura	237	0	3.9	4.9	0.1	32	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-3.3	2.7	-21.1	-20.0
Day Peak (MW)	-291.0	245.8	-1061.0	-946.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	244.8	-266.4	162.8	-142.8	1.6	0.0
Actual(MU)	233.3	-262.4	169.8	-154.7	2.3	-11.7
O/D/U/D(MU)	-11.5	4.1	7.0	-11.9	0.6	-11.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5417	10031	5878	2861	271	24458	39
State Sector	12196	16963	6894	2684	246	38982	61
Total	17613	26993	12772	5545	517	63440	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	578	1333	581	630	12	3134	77
Lignite	26	18	42	0	0	85	2
Hydro	106	38	34	19	12	209	5
Nuclear	21	53	76	0	0	150	4
Gas, Naptha & Diesel	11	17	5	0	26	59	1
RES (Wind, Solar, Biomass & Others)	116	116	182	4	1	420	10
Total	857	1575	921	652	51	4057	100

Share of RES in total generation (%)	13.54	7.39	19.82	0.56	2.26	10.35
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.27	13.20	31.82	3.44	25.58	19.20

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.020
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	177237	9:37	109
Non-Solar hr	177582	18:17	312

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-Dec-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	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	49	0.0	1.1	-1.1
3	765 kV	GAYA-VARANASI	2	0	923	0.0	12.5	-12.5
4	765 kV	SASARAM-FATEHPUR	1	0	601	0.0	9.0	-9.0
5	765 kV	GAYA-BALIA	1	0	702	0.0	12.7	-12.7
6	400 kV	PUSAULI-VARANASI	1	48	24	0.2	0.0	0.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	76	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	701	0.0	8.2	-8.2
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	919	0.0	14.6	-14.6
11	400 kV	BIHARSHARIFF-BALIA	2	0	410	0.0	5.7	-5.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	518	0.0	7.6	-7.6
13	400 kV	BIHARSHARIFF-VARANASI	2	0	400	0.0	5.1	-5.1
14	220 kV	SAHUPURI-KARAMNANA	1	14	123	0.0	1.4	-1.4
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.8	78.9	-78.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	586	577	0.0	1.1	-1.1
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	526	576	1.0	0.0	1.0
3	765 kV	JHARSUGUDA-DURG	2	0	701	0.0	12.1	-12.1
4	400 kV	JHARSUGUDA-RAIGARH	4	60	620	0.0	6.3	-6.3
5	400 kV	RANCHI-SIPAT	2	174	160	0.2	0.0	0.2
6	220 kV	BUDHIPADAR-RAIGARH	1	19	83	0.0	0.4	-0.4
7	220 kV	BUDHIPADAR-KORBA	2	120	96	0.3	0.0	0.3
ER-WR						1.4	19.9	-18.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	706	0.0	16.2	-16.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1994	0.0	96.2	-96.2
3	765 kV	ANGUL-SRIKAKULAM	2	0	2787	0.0	48.1	-48.1
4	400 kV	TALCHER-I/C	2	0	995	0.0	7.4	-7.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	160.5	-160.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	247	6	2.1	0.0	2.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	811	0	8.7	0.0	8.7
3	220 kV	ALIPURDUAR-SALAKATI	2	164	0	2.2	0.0	2.2
ER-NER						13.0	0.0	13.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	654	15.5	0.0	15.5
NER-NR						15.5	0.0	15.5
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2038	0.0	47.5	-47.5
2	HVDC	VINDHYACHAL B/B	-	136	0	3.2	0.0	3.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	253	0.0	4.0	-4.0
4	765 kV	GWALIOR-AGRA	2	0	2045	0.0	36.7	-36.7
5	765 kV	GWALIOR-PHAGI	2	0	2012	0.0	26.2	-26.2
6	765 kV	JABALPUR-ORAI	2	0	871	0.0	27.3	-27.3
7	765 kV	GWALIOR-ORAI	1	1097	0	14.9	0.0	14.9
8	765 kV	SATNA-ORAI	1	0	1103	0.0	22.0	-22.0
9	765 kV	BANASKANTHA-CHITORGARH	2	448	289	1.4	0.0	1.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	2514	0.0	46.3	-46.3
11	400 kV	ZERDA-KANKROLI	1	53	60	0.3	0.1	0.2
12	400 kV	ZERDA -BHINMAL	1	200	262	0.0	1.4	-1.4
13	400 kV	VINDHYACHAL -RIHAND	1	965	0	21.6	0.0	21.6
14	400 kV	RAPP-SHUALPUR	2	119	365	0.2	4.0	-3.8
15	220 kV	BHANPURA-RANPUR	1	0	148	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	68	5	0.5	0.0	0.5
18	220 kV	MALANPUR-AURAIYA	1	44	18	0.2	0.1	0.1
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						42.3	218.9	-176.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	810	0.0	15.6	-15.6
2	HVDC	RAIGARH-PUGALUR	2	0	4007	0.0	41.5	-41.5
3	765 kV	SOLAPUR-RAICHUR	2	885	1474	4.2	8.3	-4.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2392	0.0	30.1	-30.1
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2483	0.0	32.7	-32.7
6	400 kV	KOLHAPUR-KUDGI	2	1161	0	17.4	0.0	17.4
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
9	220 kV	XELDEM-AMBEWADI	1	0	120	2.2	0.0	2.2
WR-SR						23.8	128.2	-104.3

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)	-134	14	-40	-0.95
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	314	61	168	4.04
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-402	-187	-284	-6.81
	NER	132kV GELEPHU-SALAKATI	32	0	21	0.51
	NER	132kV MOTANGA-RANGIA	-18	0	-3	-0.06
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	49	0	23	0.55
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	197	12	90	2.17
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-934	-441	-772	-18.53
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	0	0	0	0.00
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-127	0	-107	-2.56

