



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: 15th 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 14.12.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-दिसम्बर-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 14th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 15-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)	51958	58214	44632	19877	2611	177292
Peak Shortage (MW)	0	0	0	381	0	381
Energy Met (MU)	1129	1394	1070	414	47	4054
Hydro Gen (MU)	106	27	48	19	12	212
Wind Gen (MU)	7	69	69	-	-	145
Solar Gen (MU)*	112.28	61.78	111.44	3.07	0.76	289
Energy Shortage (MU)	0.45	0.00	0.00	3.89	0.00	4.34
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	58614	69471	52549	20655	2663	200564
Time Of Maximum Demand Met	10:25	10:01	09:22	18:00	18:00	09:52

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	0.042	0.00	1.17	7.05	8.22	76.92	14.86

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	7765	0	148.3	40.5	-0.1	199	0.00
	Haryana	7855	0	149.3	94.0	-1.6	132	0.00
	Rajasthan	16682	0	306.1	109.5	-2.1	220	0.00
	Delhi	3740	0	68.3	61.7	-3.0	98	0.00
	UP	16981	0	315.8	112.3	-0.6	1047	0.00
	Uttarakhand	2246	0	40.0	31.5	0.0	193	0.15
	HP	2126	0	37.3	30.3	0.4	91	0.01
	J&K(UT) & Ladakh(UT)	2779	0	56.4	51.7	-0.2	158	0.29
	Chandigarh	238	0	3.8	3.7	0.2	29	0.00
Railways NR ISTS	179	0	3.6	3.3	0.3	44	0.00	
WR	Chhattisgarh	4263	0	88.3	25.7	-0.8	206	0.00
	Gujarat	20242	0	397.4	162.9	-0.2	610	0.00
	MP	15368	0	288.9	184.0	-3.9	420	0.00
	Maharashtra	25984	0	544.5	185.9	-2.4	643	0.00
	Goa	674	0	13.2	13.1	-0.5	94	0.00
	DNHDDPDCL	1274	0	28.9	29.3	-0.4	28	0.00
	AMNSIL	891	0	20.1	9.9	-0.1	291	0.00
BALCO	523	0	12.5	12.4	0.1	62	0.00	
SR	Andhra Pradesh	9341	0	188.5	74.5	-0.4	678	0.00
	Telangana	11664	0	216.1	109.0	0.6	782	0.00
	Karnataka	14087	0	256.0	107.0	-0.6	566	0.00
	Kerala	4157	0	82.2	65.6	1.6	292	0.00
	Tamil Nadu	15721	0	319.2	166.3	0.3	1472	0.00
	Puducherry	393	0	8.5	8.2	-0.3	28	0.00
ER	Bihar	4453	0	79.3	73.1	-0.1	320	0.00
	DVC	3328	0	69.7	-46.7	-0.9	307	0.00
	Jharkhand	1658	129	28.4	23.3	-1.7	341	3.89
	Odisha	4992	0	102.0	49.8	0.2	425	0.00
	West Bengal	6496	0	132.6	20.2	-1.8	182	0.00
	Sikkim	104	0	1.8	1.6	0.2	46	0.00
Railways ER ISTS	11	0	0.1	0.1	0.0	4	0.00	
NER	Arunachal Pradesh	152	0	2.6	2.7	-0.3	24	0.00
	Assam	1492	0	26.4	20.8	0.6	156	0.00
	Manipur	213	0	2.9	2.7	0.2	41	0.00
	Meghalaya	350	0	6.3	4.6	-0.3	79	0.00
	Mizoram	144	0	2.0	1.7	-0.3	15	0.00
	Nagaland	155	0	2.3	2.2	0.0	19	0.00
Tripura	230	0	4.0	2.8	0.0	22	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-7.7	-3.7	-20.5	-17.5
Day Peak (MW)	-447.0	-258.0	-1022.0	-1006.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	216.9	-219.5	133.2	-135.0	4.5	0.0
Actual(MU)	202.2	-229.7	150.7	-136.6	6.3	-7.1
O/D/U/D(MU)	-14.7	-10.1	17.6	-1.6	1.8	-7.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5937	13839	6418	4751	468	31413	49
State Sector	7776	11707	7949	5292	190	32913	51
Total	13713	25545	14367	10043	658	64326	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	701	1514	598	607	9	3428	78
Lignite	26	18	50	0	0	94	2
Hydro	106	27	48	19	12	212	5
Nuclear	21	40	76	0	0	137	3
Gas, Naptha & Diesel	12	16	4	0	24	56	1
RES (Wind, Solar, Biomass & Others)	144	132	214	6	1	497	11
Total	1009	1747	990	631	46	4423	100

Share of RES in total generation (%)	14.25	7.57	21.64	0.88	1.70	11.23
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.77	11.40	34.13	3.93	28.20	19.11

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.016
Based on State Max Demands	1.041

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	200564	9:52	408
Non-Solar hr	186447	18:00	529

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: 15-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	-	2	49	0.0	1.1	-1.1
3	765 kV	GAYA-VARANASI	2	0	1154	0.0	18.7	-18.7
4	765 kV	SASARAM-FATEHPUR	1	0	578	0.0	9.7	-9.7
5	765 kV	GAYA-BALIA	1	0	716	0.0	14.0	-14.0
6	400 kV	PUSAULI-VARANASI	1	51	15	0.2	0.0	0.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	80	0.0	1.3	-1.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	603	0.0	8.3	-8.3
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	684	0.0	12.2	-12.2
11	400 kV	BIHARSHARIF-BALIA	2	0	342	0.0	5.3	-5.3
12	400 kV	MOTIHARI-GORAKHPUR	2	0	432	0.0	7.3	-7.3
13	400 kV	BIHARSHARIF-VARANASI	2	0	415	0.0	5.2	-5.2
14	220 kV	SAHUPURI-KARAMNANA	1	3	84	0.0	1.0	-1.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.7	0.0	0.7
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						0.9	84.1	-83.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	787	163	4.9	0.0	4.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	399	790	0.0	1.8	-1.8
3	765 kV	JHARSUGUDA-DURG	2	0	665	0.0	11.9	-11.9
4	400 kV	JHARSUGUDA-RAIGARH	4	93	390	0.0	3.1	-3.1
5	400 kV	RANCHI-SIPAT	2	113	240	0.0	0.5	-0.5
6	220 kV	BUDHIPADAR-RAIGARH	1	0	120	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	156	61	1.5	0.0	1.5
ER-WR						6.4	18.7	-12.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.3	-12.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1656	0.0	39.6	-39.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2495	0.0	44.9	-44.9
4	400 kV	TALCHER-I/C	2	672	65	5.0	0.0	5.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	96.9	-96.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	233	52	1.5	0.2	1.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	723	0	6.7	0.0	6.7
3	220 kV	ALIPURDUAR-SALAKATI	2	143	0	1.8	0.0	1.8
ER-NER						10.0	0.2	9.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	674	0	16.4	0.0	16.4
NER-NR						16.4	0.0	16.4
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	1	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	270	198	2.7	2.7	0.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	19.4	-19.4
4	765 kV	GWALIOR-AGRA	2	0	2205	0.0	35.4	-35.4
5	765 kV	GWALIOR-PHAGI	2	0	2273	0.0	35.5	-35.5
6	765 kV	JABALPUR-ORAI	2	0	1012	0.0	36.2	-36.2
7	765 kV	GWALIOR-ORAI	1	968	0	17.0	0.0	17.0
8	765 kV	SATNA-ORAI	1	0	1149	0.0	24.0	-24.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1588	13	15.7	0.0	15.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	2489	0.0	43.0	-43.0
11	400 kV	ZERDA-KANKROLI	1	190	1	2.0	0.0	2.0
12	400 kV	ZERDA -BHINMAL	1	374	244	1.9	1.7	0.1
13	400 kV	VINDHYACHAL -RIHAND	1	963	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUJALPUR	2	255	382	0.9	3.1	-2.2
15	220 kV	BHANPURA-RANPUR	1	0	142	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.2	-1.2
17	220 kV	MEHGAON-AURAIYA	1	99	8	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	71	24	0.4	0.1	0.3
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						63.6	204.8	-141.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1022	0.0	24.0	-24.0
2	HVDC	RAIGARH-PUGALUR	2	0	3007	0.0	57.6	-57.6
3	765 kV	SOLAPUR-RAICHUR	2	1880	855	10.7	2.4	8.3
4	765 kV	WARDHA-NIZAMABAD	2	0	1878	0.0	24.2	-24.2
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2175	0.0	28.2	-28.2
6	400 kV	KOLHAPUR-KUDGI	2	1536	0	24.4	0.0	24.4
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
8	220 kV	PONDA-AMBEWADI	1	0	70	0.0	1.7	-1.7
9	220 kV	XELDEM-AMBEWADI	1	0	109	2.0	0.0	2.0
WR-SR						37.2	138.1	-100.9

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)	0	0	0	-2.37
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	0	0	0	0.77
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-5.80
	NER	132kV GELEPHU-SALAKATI	-31	-4	-17	-0.41
	NER	132kV MOTANGA-RANGIA	12	0	3	0.08
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-71	0	-38	-0.92
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-258	0	-118	-2.82
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-922	-615	-774	-18.58
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1007	-407	-728	-17.48
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-100	0	-82	-1.96

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 15-Dec-2023

Export From India (in MU)

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.00	0.00	8.70	0.00	0.00	0.00	0.00	0.00	8.70
Nepal	0.18	0.00	2.41	0.00	0.00	0.62	0.00	0.00	3.21
Bangladesh	18.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.62
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.80	0.00	11.11	0.00	0.00	0.62	0.00	0.00	30.53

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
Nepal	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.12
Bangladesh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Import	0.64	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.76

Net from India(in MU)

-ve : Export / +ve : Import

Country	GNA (ISGS/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.64	0.00	-8.70	0.00	0.00	0.00	0.00	0.00	-8.06
Nepal	-0.18	0.00	-2.29	0.00	0.00	-0.62	0.00	0.00	-3.09
Bangladesh	-18.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.62
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.16	0.00	-10.99	0.00	0.00	-0.62	0.00	0.00	-29.77