

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: 11th 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 10.12.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 10-दिसम्बर-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 10th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 11-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)	46762	53254	39424	18454	2393	160287
Peak Shortage (MW)	0	0	0	259	0	259
Energy Met (MU)	1042	1276	959	383	46	3706
Hydro Gen (MU)	107	19	31	20	12	190
Wind Gen (MU)	4	52	50	-	-	105
Solar Gen (MU)*	111.66	62.69	98.24	2.25	0.80	276
Energy Shortage (MU)	0.05	0.00	0.00	1.51	0.00	1.56
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	55244	62373	45841	18936	2523	181865
Time Of Maximum Demand Met	10:27	10:29	10:00	17:47	17:20	10:27

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	0.031	0.00	0.52	4.64	5.16	82.72	12.12

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	7469	0	135.7	44.1	-1.3	188	0.00
	Haryana	6729	0	129.5	92.4	-0.6	221	0.00
	Rajasthan	15575	0	285.6	115.3	-3.1	176	0.00
	Delhi	3885	0	64.9	56.3	0.5	277	0.00
	UP	16070	0	292.2	101.8	-0.7	792	0.00
	Uttarakhand	2034	0	37.3	26.2	0.3	183	0.00
	HP	1914	0	33.6	26.9	-0.3	44	0.00
	J&K(UT) & Ladakh(UT)	2671	0	56.3	51.8	-0.8	96	0.05
	Chandigarh	197	0	3.3	3.4	-0.1	28	0.00
Railways NR ISTS	168	0	3.5	3.6	-0.1	14	0.00	
WR	Chhattisgarh	4079	0	84.5	27.3	-0.8	363	0.00
	Gujarat	19021	0	380.8	172.6	-0.2	778	0.00
	MP	13163	0	246.3	150.6	-4.6	289	0.00
	Maharashtra	22865	0	490.8	182.5	-4.6	661	0.00
	Goa	632	0	13.5	12.3	0.6	40	0.00
	DNHDDPDCL	1176	0	27.6	27.4	0.2	39	0.00
	AMNSIL	862	0	19.6	9.5	-0.1	227	0.00
	BALCO	522	0	12.5	12.5	0.0	11	0.00
SR	Andhra Pradesh	7996	0	171.5	67.0	-1.0	519	0.00
	Telangana	9892	0	191.8	78.3	-0.4	477	0.00
	Karnataka	12381	0	230.5	107.6	-2.8	494	0.00
	Kerala	3785	0	76.4	64.6	0.7	172	0.00
	Tamil Nadu	13084	0	281.2	166.9	-1.6	548	0.00
	Puducherry	347	0	8.0	7.6	-0.3	41	0.00
ER	Bihar	4191	0	77.5	71.1	0.5	532	0.39
	DVC	2976	0	67.3	-38.6	0.9	458	0.00
	Jharkhand	1554	0	29.1	23.4	-2.5	397	1.13
	Odisha	4247	0	90.0	41.8	-0.1	675	0.00
	West Bengal	6080	0	118.1	16.8	-3.7	47	0.00
	Sikkim	93	0	1.4	1.6	-0.2	8	0.00
Railways ER ISTS	17	0	0.1	0.1	0.0	13	0.00	
NER	Arunachal Pradesh	149	0	2.8	2.9	-0.6	19	0.00
	Assam	1373	0	25.2	19.9	0.0	74	0.00
	Manipur	204	0	3.0	3.0	0.0	26	0.00
	Meghalaya	335	0	6.5	5.5	-0.1	43	0.00
	Mizoram	120	0	2.0	1.8	-0.2	6	0.00
	Nagaland	142	0	2.5	2.3	0.0	19	0.00
Tripura	224	0	3.7	2.7	-0.3	48	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-5.5	-1.3	-22.3	-13.5
Day Peak (MW)	-424.0	-115.2	-1036.0	-1048.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	207.0	-196.7	129.3	-140.8	1.2	0.0
Actual(MU)	196.9	-192.1	143.3	-155.1	2.0	-4.9
O/D/U/D(MU)	-10.1	4.6	14.1	-14.3	0.8	-4.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6477	12244	6868	3981	155	29725	44
State Sector	10771	15178	7694	4787	205	38634	56
Total	17248	27421	14562	8768	360	68359	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	611	1393	550	586	12	3151	78
Lignite	30	15	48	0	0	92	2
Hydro	107	19	31	20	12	190	5
Nuclear	21	40	75	0	0	136	3
Gas, Naptha & Diesel	12	6	5	0	25	47	1
RES (Wind, Solar, Biomass & Others)	138	116	174	4	1	432	11
Total	919	1588	882	610	49	4048	100

Share of RES in total generation (%)	15.02	7.29	19.71	0.62	1.62	10.68
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.95	11.03	31.73	3.38	26.18	18.65

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.016
Based on State Max Demands	1.034

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	181865	10:27	0
Non-Solar hr	169410	18:25	259

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: 11-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	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	1113	0.0	17.3	-17.3
4	765 kV	SASARAM-FATEHPUR	1	0	538	0.0	8.7	-8.7
5	765 kV	GAYA-BALIA	1	2	725	0.0	11.9	-11.9
6	400 kV	PUSAULI-VARANASI	1	22	26	0.0	0.3	-0.3
7	400 kV	PUSAULI-ALLAHABAD	1	0	69	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	733	0.0	9.3	-9.3
9	400 kV	PATNA-BALIA	2	0	0	0.0	0.0	0.0
10	400 kV	NAUBATPUR-BALIA	2	0	758	0.0	12.0	-12.0
11	400 kV	BIHARSHARIFF-BALIA	2	0	406	0.0	5.0	-5.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	475	0.0	7.3	-7.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	406	0.0	4.7	-4.7
14	220 kV	SAHUPURI-KARAMNUSA	1	21	99	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	0.0	0.0	0.0
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						0.0	79.9	-79.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	285	822	0.0	9.8	-9.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	306	956	0.0	10.1	-10.1
3	765 kV	JHARSUGUDA-DURG	2	0	706	0.0	13.5	-13.5
4	400 kV	JHARSUGUDA-RAIGARH	4	0	547	0.0	6.1	-6.1
5	400 kV	RANCHI-SIPAT	2	100	303	0.0	2.9	-2.9
6	220 kV	BUDHIPADAR-RAIGARH	1	22	71	0.0	0.7	-0.7
7	220 kV	BUDHIPADAR-KORBA	2	168	26	2.0	0.0	2.0
ER-WR						2.0	43.2	-41.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	544	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1635	0.0	34.0	-34.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2527	0.0	47.2	-47.2
4	400 kV	TALCHER-I/C	2	646	0	10.2	0.0	10.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	93.6	-93.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	290	14	2.3	0.0	2.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	905	0	9.0	0.0	9.0
3	220 kV	ALIPURDUAR-SALAKATI	2	178	0	2.1	0.0	2.1
ER-NER						13.4	0.0	13.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	659	0	16.1	0.0	16.1
NER-NR						16.1	0.0	16.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	1534	0.0	27.6	-27.6
2	HVDC	VINDHYACHAL B/B	-	269	0	7.3	0.0	7.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	787	0.0	13.2	-13.2
4	765 kV	GWALIOR-AGRA	2	0	2145	0.0	33.6	-33.6
5	765 kV	GWALIOR-PHAGI	2	0	2259	0.0	35.8	-35.8
6	765 kV	JABALPUR-ORAI	2	0	924	0.0	29.4	-29.4
7	765 kV	GWALIOR-ORAI	1	1085	0	16.8	0.0	16.8
8	765 kV	SATNA-ORAI	1	0	1144	0.0	23.1	-23.1
9	765 kV	BANASKANTHA-CHITORGARH	2	1464	0	19.8	0.0	19.8
10	765 kV	VINDHYACHAL-VARANASI	2	0	2298	0.0	37.9	-37.9
11	400 kV	ZERDA-KANKROLI	1	195	0	2.9	0.0	2.9
12	400 kV	ZERDA -BHINMAL	1	354	192	2.1	0.8	1.3
13	400 kV	VINDHYACHAL -RIHAND	1	956	0	21.3	0.0	21.3
14	400 kV	RAPP-SHUALPUR	2	261	383	0.7	3.4	-2.7
15	220 kV	BHANPURA-RANPUR	1	0	123	0.0	2.2	-2.2
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.9	-0.9
17	220 kV	MEHGAON-AURAIYA	1	86	5	0.5	0.0	0.5
18	220 kV	MALANPUR-AURAIYA	1	59	19	0.2	0.1	0.2
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						71.6	207.8	-136.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1002	0.0	15.0	-15.0
2	HVDC	RAIGARH-PUGALUR	2	0	2504	0.0	46.2	-46.2
3	765 kV	SOLAPUR-RAICHUR	2	1454	550	6.3	4.6	1.7
4	765 kV	WARDHA-NIZAMABAD	2	0	1845	0.0	27.4	-27.4
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2054	0.0	32.1	-32.1
6	400 kV	KOLHAPUR-KUDGI	2	1307	0	19.9	0.0	19.9
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	110	2.1	0.0	2.1
WR-SR						28.3	125.3	-97.0

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)	-154	39	-75	-1.80
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	337	-30	123	2.96
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-291	-217	-253	-6.08
	NER	132kV GELEPHU-SALAKATI	-32	-15	-24	-0.58
	NER	132kV MOTANGA-RANGIA	-10	0	0	-0.01
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-64	0	-19	-0.45
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-119	0	-33	-0.80
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-936	-646	-840	-20.17
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1048	-204	-561	-13.46
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-100	0	-87	-2.08

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 11-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	6.13	0.00	0.00	0.00	0.00	0.00	6.13
Nepal	0.00	0.00	1.81	0.00	0.00	0.00	0.00	0.00	1.81
Bangladesh	20.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.17
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	20.17	0.00	7.94	0.00	0.00	0.00	0.00	0.00	28.11

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
Nepal	0.00	0.00	0.14	0.00	0.00	0.30	0.00	0.00	0.44
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	0.76	0.00	0.14	0.00	0.00	0.30	0.00	0.00	1.20

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	0.76	0.00	-6.13	0.00	0.00	0.00	0.00	0.00	-5.37
Nepal	0.00	0.00	-1.67	0.00	0.00	0.30	0.00	0.00	-1.37
Bangladesh	-20.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-20.17
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-19.41	0.00	-7.80	0.00	0.00	0.30	0.00	0.00	-26.91