



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: 26th 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 25.12.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 25-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 25th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 26-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)	53076	59433	41977	19431	2457	176374
Peak Shortage (MW)	78	0	0	98	0	176
Energy Met (MU)	1145	1420	1046	411	46	4068
Hydro Gen (MU)	112	37	47	18	10	225
Wind Gen (MU)	13	78	76	-	-	166
Solar Gen (MU)*	98.48	57.23	112.06	2.30	1.10	271
Energy Shortage (MU)	0.57	0.00	0.00	0.70	0.16	1.43
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	59244	73231	53949	20636	2507	206421
Time Of Maximum Demand Met	11:20	10:46	11:42	17:49	17:22	10:29

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	0.067	0.00	3.66	12.21	15.87	72.33	11.80

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	7354	0	139.6	45.3	-0.1	283	0.00
	Haryana	7698	0	141.2	92.0	-1.7	222	0.00
	Rajasthan	17029	0	317.7	117.8	-2.1	218	0.00
	Delhi	4358	0	71.1	64.2	-0.8	371	0.00
	UP	17478	147	327.9	105.4	-2.1	529	0.46
	Uttarakhand	2297	0	42.0	28.4	0.3	196	0.00
	HP	2071	0	36.4	29.7	0.0	172	0.00
	J&K(UT) & Ladakh(UT)	2834	0	61.7	57.9	-1.1	97	0.11
	Chandigarh	215	0	3.7	3.8	-0.1	43	0.00
Railways NR ISTS	176	0	3.3	3.5	-0.2	9	0.00	
WR	Chhattisgarh	4592	0	97.2	40.0	2.9	344	0.00
	Gujarat	21408	0	390.9	146.3	1.0	596	0.00
	MP	17549	0	324.5	196.2	-6.4	299	0.00
	Maharashtra	26589	0	535.5	164.9	-6.5	928	0.00
	Goa	605	0	12.2	11.8	-0.2	62	0.00
	DNHDDPDCL	1255	0	28.5	28.4	0.1	101	0.00
	AMNSIL	871	0	18.9	7.0	0.1	288	0.00
	BALCO	519	0	12.3	12.5	-0.2	8	0.00
SR	Andhra Pradesh	10805	0	196.9	79.2	1.5	945	0.00
	Telangana	12165	0	223.6	94.6	-1.8	629	0.00
	Karnataka	14070	0	254.0	99.8	-1.8	663	0.00
	Kerala	3760	0	75.2	60.2	0.7	199	0.00
	Tamil Nadu	14130	0	288.4	148.8	-5.4	391	0.00
	Puducherry	385	0	8.1	7.7	-0.3	34	0.00
ER	Bihar	4605	0	87.0	81.8	-1.1	58	0.00
	DVC	3340	0	72.6	-46.4	0.0	308	0.00
	Jharkhand	1695	0	33.0	25.0	0.0	257	0.70
	Odisha	4260	0	89.9	32.4	-1.6	380	0.00
	West Bengal	6318	0	126.7	24.9	-2.5	339	0.00
	Sikkim	102	0	1.7	1.5	0.2	62	0.00
Railways ER ISTS	23	0	0.1	0.1	0.1	18	0.00	
NER	Arunachal Pradesh	161	0	2.7	2.8	-0.2	54	0.00
	Assam	1423	0	25.9	20.1	0.0	79	0.00
	Manipur	216	17	3.1	3.2	-0.1	34	0.09
	Meghalaya	311	28	6.2	5.3	-0.1	78	0.07
	Mizoram	120	0	1.9	1.7	-0.3	14	0.00
	Nagaland	138	0	2.2	2.2	-0.1	14	0.00
Tripura	224	0	3.8	3.0	-0.3	8	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.1	-4.7	-19.3	-15.4
Day Peak (MW)	-534.0	-274.0	-981.0	-762.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	239.2	-241.2	131.3	-130.6	1.3	0.0
Actual(MU)	237.1	-246.4	132.0	-132.2	0.2	-9.3
O/D/U/D(MU)	-2.2	-5.3	0.8	-1.6	-1.1	-9.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6647	13549	8518	5131	215	34060	53
State Sector	8646	10487	6885	4913	190	31120	47
Total	15293	24035	15403	10044	405	65180	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	687	1531	602	599	16	3435	77
Lignite	27	21	52	0	0	100	2
Hydro	112	37	47	18	10	225	5
Nuclear	21	53	52	0	0	126	3
Gas, Naptha & Diesel	10	27	7	0	25	68	2
RES (Wind, Solar, Biomass & Others)	135	139	223	4	1	502	11
Total	991	1809	982	621	52	4455	100

Share of RES in total generation (%)	13.59	7.71	22.66	0.66	2.13	11.28
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	27.04	12.74	32.77	2.73	22.31	19.07

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.015
Based on State Max Demands	1.032

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206421	10:29	123
Non-Solar hr	186114	18:40	383

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: 26-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	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	1190	0.0	17.1	-17.1
4	765 kV	SASARAM-FATEHPUR	1	0	588	0.0	8.5	-8.5
5	765 kV	GAYA-BALIA	1	0	657	0.0	11.6	-11.6
6	400 kV	PUSAULI-VARANASI	1	25	38	0.0	0.0	0.0
7	400 kV	PUSAULI-ALLAHABAD	1	0	72	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	660	0.0	9.3	-9.3
9	400 kV	PATNA-BALIA	2	0	611	0.0	10.9	-10.9
10	400 kV	NAUBATPUR-BALIA	2	0	646	0.0	11.4	-11.4
11	400 kV	BIHARSHARIFF-BALIA	2	0	336	0.0	5.0	-5.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	490	0.0	8.8	-8.8
13	400 kV	BIHARSHARIFF-VARANASI	2	0	460	0.0	7.0	-7.0
14	220 kV	SAHUPURI-KARAMNANA	1	0	131	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	0.4	0.0	0.4
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						0.5	93.8	-93.3
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1161	0	15.0	0.0	15.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	569	757	0.0	1.3	-1.3
3	765 kV	JHARSUGUDA-DURG	2	0	960	0.0	17.4	-17.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	551	0.0	6.7	-6.7
5	400 kV	RANCHI-SIPAT	2	164	287	0.0	1.3	-1.3
6	220 kV	BUDHIPADAR-RAIGARH	1	59	71	0.0	0.2	-0.2
7	220 kV	BUDHIPADAR-KORBA	2	114	81	0.0	0.0	0.4
ER-WR						15.5	26.9	-11.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	17	0.0	0.0	0.0
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1497	0.0	33.1	-33.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2909	0.0	55.9	-55.9
4	400 kV	TALCHER-I/C	2	661	0	11.7	0.0	11.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	89.0	-89.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	281	0	2.7	0.0	2.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	875	0	10.3	0.0	10.3
3	220 kV	ALIPURDUAR-SALAKATI	2	149	0	2.0	0.0	2.0
ER-NER						14.9	0.0	14.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	660	0	16.3	0.0	16.3
NER-NR						16.3	0.0	16.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	1	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	0	101	0.0	2.4	-2.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	979	0.0	19.0	-19.0
4	765 kV	GWALIOR-AGRA	2	0	2312	0.0	39.3	-39.3
5	765 kV	GWALIOR-PHAGI	2	0	2092	0.0	34.1	-34.1
6	765 kV	JABALPUR-ORAI	2	0	1048	0.0	35.3	-35.3
7	765 kV	GWALIOR-ORAI	1	1156	0	17.9	0.0	17.9
8	765 kV	SATNA-ORAI	1	0	1060	0.0	21.0	-21.0
9	765 kV	BANASKANTHA-CHITORGARH	2	886	779	5.2	2.5	2.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	2203	0.0	38.1	-38.1
11	400 kV	ZERDA-KANKROLI	1	104	160	0.6	0.5	0.1
12	400 kV	ZERDA -BHINMAL	1	372	361	1.6	2.3	-0.7
13	400 kV	VINDHYACHAL -RIHAND	1	476	0	10.5	0.0	10.5
14	400 kV	RAPP-SHUALPUR	2	98	461	0.1	4.0	-3.9
15	220 kV	BHANPURA-RANPUR	1	0	159	0.0	2.6	-2.6
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	79	0	0.7	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	50	11	0.3	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						37.0	202.6	-165.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1011	0.0	13.3	-13.3
2	HVDC	RAIGARH-PUGALUR	2	0	1501	0.0	25.2	-25.2
3	765 kV	SOLAPUR-RAICHUR	2	966	1487	3.1	10.2	-7.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2290	0.0	29.0	-29.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2599	0.0	38.4	-38.4
6	400 kV	KOLHAPUR-KUDGI	2	1496	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	96	1.9	0.0	1.9
WR-SR						24.9	116.2	-91.3

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)	-187	-43	-103	-2.47
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	250	-180	-38	-0.91
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-223	-90	-173	-4.16
	NER	132kV GELEPHU-SALAKATI	-35	0	-23	-0.56
	NER	132kV MOTANGA-RANGIA	10	-7	1	0.02
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-71	0	-51	-1.22
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-274	0	-145	-3.47
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-879	-498	-717	-17.20
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-762	-419	-643	-15.44
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-102	0	-89	-2.14

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 26-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	9.46	0.00	0.00	0.07	0.00	0.00	9.53
Nepal	0.35	0.00	4.72	0.00	0.00	0.00	0.00	0.00	5.07
Bangladesh	17.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.15
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	17.50	0.00	14.18	0.00	0.00	0.07	0.00	0.00	31.75

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
Nepal	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.47
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	0.58	0.00	0.00	0.00	0.00	0.47	0.00	0.00	1.05

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	0.58	0.00	-9.46	0.00	0.00	-0.07	0.00	0.00	-8.95
Nepal	-0.35	0.00	-4.72	0.00	0.00	0.47	0.00	0.00	-4.60
Bangladesh	-17.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-17.15
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-16.92	0.00	-14.18	0.00	0.00	0.40	0.00	0.00	-30.70