



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: 27th 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 26.12.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 26-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 26th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 27-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)	54580	60088	44549	20053	2585	181855
Peak Shortage (MW)	0	0	0	375	40	415
Energy Met (MU)	1152	1445	1092	426	47	4161
Hydro Gen (MU)	111	39	54	16	11	232
Wind Gen (MU)	8	39	76	-	-	123
Solar Gen (MU)*	98.17	59.91	116.99	2.32	1.11	279
Energy Shortage (MU)	0.55	0.00	0.00	2.77	0.28	3.60
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	59795	73947	55315	21156	2664	210024
Time Of Maximum Demand Met	10:40	11:00	11:34	17:38	17:42	10:46

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	0.026	0.00	0.00	2.55	2.55	83.31	14.14

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	7161	0	139.0	42.6	0.8	301	0.00
	Haryana	7672	0	147.1	97.3	-0.1	220	0.00
	Rajasthan	17376	0	325.2	120.0	-0.9	276	0.00
	Delhi	4382	0	73.8	66.2	-0.5	420	0.00
	UP	18304	0	317.7	101.2	-3.3	953	0.00
	Uttarakhand	2370	0	42.9	30.3	-0.4	126	0.10
	HP	2087	0	37.8	30.7	0.5	221	0.02
	J&K(UT) & Ladakh(UT)	2855	0	61.1	55.9	0.3	161	0.43
	Chandigarh	243	0	4.0	3.9	0.1	33	0.00
Railways NR ISTS	161	0	3.2	3.4	-0.2	53	0.00	
WR	Chhattisgarh	4646	0	96.4	37.9	-0.2	482	0.00
	Gujarat	21128	0	396.1	172.1	-1.4	612	0.00
	MP	17253	0	323.7	200.2	-4.2	527	0.00
	Maharashtra	27557	0	555.1	173.2	-7.3	603	0.00
	Goa	675	0	13.2	13.0	-0.3	85	0.00
	DNHDDPDCL	1280	0	29.2	29.3	-0.1	25	0.00
	AMNSIL	855	0	18.6	8.6	0.3	306	0.00
	BALCO	520	0	12.4	12.5	-0.1	10	0.00
SR	Andhra Pradesh	10900	0	198.8	84.2	1.8	725	0.00
	Telangana	12187	0	228.6	94.8	-0.5	848	0.00
	Karnataka	14617	0	265.9	103.8	-1.3	766	0.00
	Kerala	4084	0	81.2	64.1	0.6	330	0.00
	Tamil Nadu	15518	0	308.6	153.7	2.5	1446	0.00
	Puducherry	397	0	8.6	8.2	-0.3	26	0.00
ER	Bihar	4580	0	88.6	82.1	0.5	162	0.16
	DVC	3188	0	72.5	-47.2	0.1	437	0.00
	Jharkhand	1727	22	31.9	23.6	-0.6	317	2.61
	Odisha	4558	0	98.7	40.9	-2.4	232	0.00
	West Bengal	6753	0	132.3	20.8	-1.9	142	0.00
	Sikkim	105	0	1.8	1.6	0.2	49	0.00
Railways ER ISTS	21	0	0.1	0.1	0.0	14	0.00	
NER	Arunachal Pradesh	167	0	3.0	2.8	0.2	30	0.00
	Assam	1504	0	26.4	20.5	0.5	143	0.00
	Manipur	222	2	3.2	3.0	0.2	42	0.12
	Meghalaya	315	0	6.2	4.7	-0.1	32	0.16
	Mizoram	111	0	1.8	1.6	-0.3	16	0.00
	Nagaland	148	0	2.2	2.3	-0.2	21	0.00
Tripura	235	0	3.9	3.1	-0.2	61	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.8	-3.8	-21.3	-16.0
Day Peak (MW)	-670.9	-192.3	-1055.0	-767.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	225.3	-225.7	133.5	-134.2	1.2	0.0
Actual(MU)	223.3	-229.8	141.1	-142.0	0.8	-6.7
O/D/U/D(MU)	-2.0	-4.1	7.6	-7.8	-0.5	-6.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6879	10694	8308	5131	185	31197	50
State Sector	8666	10084	7285	4913	190	31138	50
Total	15545	20778	15593	10044	375	62335	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	714	1589	621	626	16	3565	78
Lignite	27	19	55	0	0	101	2
Hydro	111	39	54	16	11	232	5
Nuclear	21	53	52	0	0	126	3
Gas, Naptha & Diesel	15	26	7	0	24	73	2
RES (Wind, Solar, Biomass & Others)	125	103	232	4	1	465	10
Total	1012	1830	1020	646	52	4562	100

Share of RES in total generation (%)	12.32	5.63	22.70	0.64	2.13	10.20
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	25.30	10.74	33.10	2.42	23.33	17.96

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.013
Based on State Max Demands	1.036

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	210024	10:46	216
Non-Solar hr	190968	18:39	559

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: 27-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	1039	0.0	19.9	-19.9
4	765 kV	SASARAM-FATEHPUR	1	0	566	0.0	10.0	-10.0
5	765 kV	GAYA-BALIA	1	0	679	0.0	12.5	-12.5
6	400 kV	PUSAULI-VARANASI	1	16	50	0.0	0.1	-0.1
7	400 kV	PUSAULI-ALLAHABAD	1	2	63	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	686	0.0	10.0	-10.0
9	400 kV	PATNA-BALIA	2	0	675	0.0	12.2	-12.2
10	400 kV	NAUBATPUR-BALIA	2	0	577	0.0	9.5	-9.5
11	400 kV	BIHARSHARIFF-BALIA	2	0	352	0.0	5.4	-5.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	505	0.0	9.2	-9.2
13	400 kV	BIHARSHARIFF-VARANASI	2	0	402	0.0	7.5	-7.5
14	220 kV	SAHUPURI-KARAMNUSA	1	7	93	0.0	1.3	-1.3
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						0.4	99.8	-99.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1367	0	16.4	0.0	16.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	184	1046	0.0	7.3	-7.3
3	765 kV	JHARSUGUDA-DURG	2	0	990	0.0	18.3	-18.3
4	400 kV	JHARSUGUDA-RAIGARH	4	0	482	0.0	6.9	-6.9
5	400 kV	RANCHI-SIPAT	2	21	346	0.0	2.9	-2.9
6	220 kV	BUDHIPADAR-RAIGARH	1	52	75	0.0	0.4	-0.4
7	220 kV	BUDHIPADAR-KORBA	2	103	68	0.5	0.0	0.5
ER-WR						16.8	35.9	-19.0
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	1244	0.0	30.1	-30.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	3133	0.0	54.9	-54.9
4	400 kV	TALCHER-I/C	2	676	0	14.8	0.0	14.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	85.0	-85.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	274	7	2.5	0.0	2.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	861	0	9.9	0.0	9.9
3	220 kV	ALIPURDUAR-SALAKATI	2	148	0	1.9	0.0	1.9
ER-NER						14.3	0.0	14.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	675	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	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	1451	0.0	26.6	-26.6
4	765 kV	GWALIOR-AGRA	2	0	2153	0.0	35.2	-35.2
5	765 kV	GWALIOR-PHAGI	2	0	2159	0.0	38.1	-38.1
6	765 kV	JABALPUR-ORAI	2	0	1053	0.0	33.5	-33.5
7	765 kV	GWALIOR-ORAI	1	1107	0	18.8	0.0	18.8
8	765 kV	SATNA-ORAI	1	0	1117	0.0	21.9	-21.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1280	173	15.2	0.1	15.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	2360	0.0	34.5	-34.5
11	400 kV	ZERDA-KANKROLI	1	141	48	1.9	0.0	1.9
12	400 kV	ZERDA -BHINMAL	1	417	238	2.3	0.8	1.5
13	400 kV	VINDHYACHAL -RIHAND	1	967	0	15.3	0.0	15.3
14	400 kV	RAPP-SHUALPUR	2	103	484	0.3	3.8	-3.6
15	220 kV	BHANPURA-RANPUR	1	0	151	0.0	2.7	-2.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	122	0	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	100	13	0.6	0.0	0.6
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						55.5	201.0	-145.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	508	0.0	12.0	-12.0
2	HVDC	RAIGARH-PUGALUR	2	0	2004	0.0	39.2	-39.2
3	765 kV	SOLAPUR-RAICHUR	2	1127	1693	4.0	9.0	-5.0
4	765 kV	WARDHA-NIZAMABAD	2	0	2439	0.0	31.0	-31.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2881	0.0	38.4	-38.4
6	400 kV	KOLHAPUR-KUDGI	2	1438	0	20.8	0.0	20.8
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	98	1.9	0.0	1.9
WR-SR						26.7	129.7	-103.0

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)	-235	92	-124	-2.97
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	240	-210	-39	-0.93
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-224	-63	-165	-3.96
	NER	132kV GELEPHU-SALAKATI	-54	-22	-33	-0.79
	NER	132kV MOTANGA-RANGIA	-27	0	-5	-0.13
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-66	0	-43	-1.03
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-212	0	-116	-2.79
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-929	-596	-794	-19.06
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-767	-412	-667	-16.00
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-126	0	-95	-2.28

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 27-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	8.84	0.00	0.00	0.76	0.00	0.00	9.60
Nepal	0.35	0.00	4.35	0.00	0.00	0.00	0.00	0.00	4.70
Bangladesh	19.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.39	0.00	13.19	0.00	0.00	0.76	0.00	0.00	33.34

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	0.82	0.00	0.00	0.82
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	0.82	0.00	0.00	1.40

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	-8.84	0.00	0.00	-0.76	0.00	0.00	-9.02
Nepal	-0.35	0.00	-4.35	0.00	0.00	0.82	0.00	0.00	-3.88
Bangladesh	-19.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.81	0.00	-13.19	0.00	0.00	0.06	0.00	0.00	-31.94