



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: 30th 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 29.12.2023.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 29-दिसम्बर-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रांभांप्रेंकें 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 29th December 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 30-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)	55175	59827	44956	20277	2580	182815
Peak Shortage (MW)	160	0	0	728	38	926
Energy Met (MU)	1182	1462	1129	438	47	4258
Hydro Gen (MU)	101	43	60	16	10	231
Wind Gen (MU)	20	50	87	-	-	157
Solar Gen (MU)*	104.06	54.18	104.64	3.31	1.15	267
Energy Shortage (MU)	2.48	0.00	0.00	4.14	0.40	7.02
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	60881	74115	57244	20997	2661	213620
Time Of Maximum Demand Met	10:57	10:45	09:57	18:16	17:31	10:45

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	0.030	0.00	0.00	3.83	3.83	81.53	14.64

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	7544	0	142.5	52.1	-0.3	318	0.00
	Haryana	8106	0	146.7	87.9	0.7	163	0.00
	Rajasthan	17003	0	319.0	125.1	-2.7	226	0.00
	Delhi	4813	0	80.0	67.1	-0.8	225	0.00
	UP	18159	0	345.3	101.4	-0.6	811	0.00
	Uttarakhand	2108	150	41.1	28.2	0.4	178	1.01
	HP	2139	0	38.4	31.8	0.2	224	0.01
	J&K(UT) & Ladakh(UT)	2896	60	61.2	56.8	-0.4	239	1.46
	Chandigarh	251	0	4.2	4.1	0.1	48	0.00
Railways NR ISTS	170	0	3.5	2.9	0.6	59	0.00	
WR	Chhattisgarh	4833	0	97.1	37.8	-2.1	270	0.00
	Gujarat	21370	0	399.7	174.3	-3.0	429	0.00
	MP	17819	0	329.6	203.7	-3.9	336	0.00
	Maharashtra	27468	0	561.5	176.6	-0.9	549	0.00
	Goa	694	0	13.6	13.3	-0.2	90	0.00
	DNHDDPDCL	1264	0	29.0	29.4	-0.4	17	0.00
	AMNSIL	872	0	19.4	9.4	0.3	343	0.00
	BALCO	519	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	10980	0	205.2	80.2	-2.0	324	0.00
	Telangana	12666	0	234.5	103.2	0.2	628	0.00
	Karnataka	14962	0	269.0	105.1	-0.5	577	0.00
	Kerala	4181	0	85.7	63.7	1.5	618	0.00
	Tamil Nadu	15816	0	325.4	167.3	1.1	712	0.00
	Puducherry	410	0	9.0	8.5	-0.2	21	0.00
ER	Bihar	4376	0	89.8	82.3	1.2	200	1.88
	DVC	3415	0	73.0	-39.1	0.4	573	0.00
	Jharkhand	1744	307	31.2	23.4	-0.9	247	2.26
	Odisha	5578	0	106.2	46.6	-0.4	244	0.00
	West Bengal	6709	0	136.1	21.4	-2.2	134	0.00
	Sikkim	115	0	1.7	1.9	-0.2	12	0.00
Railways ER ISTS	11	0	0.1	0.1	0.0	1	0.00	
NER	Arunachal Pradesh	165	0	2.9	2.8	-0.1	57	0.00
	Assam	1506	0	26.6	20.4	0.2	93	0.00
	Manipur	230	0	3.1	3.0	0.1	37	0.17
	Meghalaya	341	38	6.1	5.1	-0.2	186	0.23
	Mizoram	132	0	2.0	1.8	-0.2	27	0.00
	Nagaland	158	0	2.4	2.4	-0.1	21	0.00
Tripura	230	0	3.9	2.8	-0.3	18	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.9	-4.4	-17.2	-15.8
Day Peak (MW)	-668.0	-311.0	-922.0	-767.4

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	217.6	-243.6	132.9	-107.7	0.8	0.0
Actual(MU)	210.1	-245.1	138.2	-111.6	-0.6	-8.9
O/D/U/D(MU)	-7.4	-1.5	5.2	-3.9	-1.4	-8.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6619	10394	6958	5591	185	29747	49
State Sector	8821	9812	6538	5546	181	30897	51
Total	15440	20205	13496	11137	366	60644	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	738	1611	639	605	16	3609	78
Lignite	28	14	59	0	0	101	2
Hydro	101	43	60	16	10	231	5
Nuclear	21	53	66	0	0	140	3
Gas, Naptha & Diesel	24	26	7	0	25	82	2
RES (Wind, Solar, Biomass & Others)	147	108	228	5	1	490	11
Total	1058	1856	1059	625	53	4652	100

Share of RES in total generation (%)	13.92	5.83	21.52	0.84	2.18	10.53
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	25.47	11.08	33.50	3.34	21.92	18.54

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.010
Based on State Max Demands	1.038

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	213620	10:45	360
Non-Solar hr	191075	18:20	1189

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: 30-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	965	0.0	14.7	-14.7
4	765 kV	SASARAM-FATEHPUR	1	0	530	0.0	9.4	-9.4
5	765 kV	GAYA-BALIA	1	0	615	0.0	10.7	-10.7
6	400 kV	PUSAULI-VARANASI	1	26	48	0.0	0.0	0.0
7	400 kV	PUSAULI-ALLAHABAD	1	0	74	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	664	0.0	8.9	-8.9
9	400 kV	PATNA-BALIA	2	0	451	0.0	7.8	-7.8
10	400 kV	NAUBATPUR-BALIA	2	0	464	0.0	7.8	-7.8
11	400 kV	BIHARSHARIFF-BALIA	2	39	205	0.0	2.2	-2.2
12	400 kV	MOTIHARI-GORAKHPUR	2	0	457	0.0	7.9	-7.9
13	400 kV	BIHARSHARIFF-VARANASI	2	0	373	0.0	6.2	-6.2
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	0.3	0.0	0.3
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						0.3	79.7	-79.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1550	0	18.7	0.0	18.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	631	787	0.0	1.8	-1.8
3	765 kV	JHARSUGUDA-DURG	2	0	873	0.0	16.7	-16.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	546	0.0	5.5	-5.5
5	400 kV	RANCHI-SIPAT	2	109	276	0.0	1.2	-1.2
6	220 kV	BUDHIPADAR-RAIGARH	1	52	77	0.0	0.2	-0.2
7	220 kV	BUDHIPADAR-KORBA	2	151	23	1.4	0.0	1.4
ER-WR						20.1	25.3	-5.2
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	1996	0.0	39.5	-39.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2759	0.0	50.1	-50.1
4	400 kV	TALCHER-I/C	2	512	158	5.4	0.0	5.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	89.5	-89.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	288	0	2.9	0.0	2.9
2	400 kV	ALIPURDUAR-BONGAIGAON	2	881	0	10.7	0.0	10.7
3	220 kV	ALIPURDUAR-SALAKATI	2	154	0	2.0	0.0	2.0
ER-NER						15.6	0.0	15.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	659	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	1	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	437	0	7.8	0.0	7.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1640	0.0	32.8	-32.8
4	765 kV	GWALIOR-AGRA	2	0	2549	0.0	38.8	-38.8
5	765 kV	GWALIOR-PHAGI	2	0	2243	0.0	39.6	-39.6
6	765 kV	JABALPUR-ORAI	2	0	1219	0.0	36.0	-36.0
7	765 kV	GWALIOR-ORAI	1	1099	0	19.2	0.0	19.2
8	765 kV	SATNA-ORAI	1	0	1199	0.0	22.9	-22.9
9	765 kV	BANASKANTHA-CHITORGARH	2	1032	594	13.0	0.7	12.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	2936	0.0	42.6	-42.6
11	400 kV	ZERDA-KANKROLI	1	185	91	1.8	0.1	1.8
12	400 kV	ZERDA -BHINMAL	1	403	241	2.9	0.5	2.4
13	400 kV	VINDHYACHAL -RIHAND	1	979	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUALPUR	2	87	552	0.1	4.3	-4.2
15	220 kV	BHANPURA-RANPUR	1	0	163	0.0	2.8	-2.8
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	112	3	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	86	26	0.5	0.1	0.5
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						68.5	222.4	-153.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1012	0.0	11.4	-11.4
2	HVDC	RAIGARH-PUGALUR	2	0	3004	0.0	44.7	-44.7
3	765 kV	SOLAPUR-RAICHUR	2	1561	1231	7.7	6.5	1.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2316	0.0	31.8	-31.8
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	33.5	-33.5
6	400 kV	KOLHAPUR-KUDGI	2	1653	0	22.2	0.0	22.2
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	105	1.9	0.0	1.9
WR-SR						31.8	128.0	-96.2

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)	-224	16	-113	-2.71
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	237	-222	-45	-1.07
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-236	-85	-173	-4.16
	NER	132kV GELEPHU-SALAKATI	-55	-28	-31	-0.74
	NER	132kV MOTANGA-RANGIA	-26	7	-7	-0.17
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-69	0	-46	-1.11
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-311	-1	-139	-3.33
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-828	-427	-637	-15.29
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-767	-498	-659	-15.82
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-94	0	-79	-1.90

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 30-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	9.81	0.00	0.00	0.00	0.00	0.00	9.81
Nepal	0.29	0.00	3.80	0.00	0.00	0.06	0.00	0.00	4.15
Bangladesh	15.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.28
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	15.57	0.00	13.61	0.00	0.00	0.06	0.00	0.00	29.24

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
Nepal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56

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	0.56	0.00	-9.81	0.00	0.00	0.00	0.00	0.00	-9.25
Nepal	-0.29	0.00	-3.80	0.00	0.00	-0.06	0.00	0.00	-4.15
Bangladesh	-15.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-15.28
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-15.01	0.00	-13.61	0.00	0.00	-0.06	0.00	0.00	-28.68