



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: 02 January 2024

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 01.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 01-जनवरी-2024 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 01 January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 02-Jan-2024

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)	55410	56267	41466	19210	2352	174705
Peak Shortage (MW)	8	0	0	0	12	20
Energy Met (MU)	1178	1392	1077	410	44	4101
Hydro Gen (MU)	99	39	47	14	9	209
Wind Gen (MU)	21	68	55	-	-	143
Solar Gen (MU)*	83.50	51.71	112.87	2.12	1.17	251
Energy Shortage (MU)	2.32	0.00	0.00	1.31	0.41	4.04
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	61335	70372	56770	20430	2434	207953
Time Of Maximum Demand Met	12:30	11:14	09:59	10:04	17:43	11:14

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	0.062	0.02	2.04	6.97	9.03	67.58	23.39

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	7754	0	148.6	66.8	-0.8	295	0.00
	Haryana	7946	0	142.4	87.1	-0.9	243	0.00
	Rajasthan	16767	0	312.7	143.8	-2.7	467	2.03
	Delhi	5062	0	79.6	71.3	-1.3	211	0.00
	UP	19332	0	344.5	114.5	-2.5	700	0.00
	Uttarakhand	2281	0	41.9	29.9	-0.1	267	0.10
	HP	2022	0	35.8	30.4	-0.5	128	0.04
	J&K(UT) & Ladakh(UT)	2968	0	64.4	60.0	-0.4	122	0.15
	Chandigarh	281	0	4.7	4.4	0.2	72	0.00
Railways NR ISTS	163	0	3.2	3.3	-0.1	26	0.00	
WR	Chhattisgarh	4759	0	96.7	37.8	-1.5	197	0.00
	Gujarat	20388	0	380.2	148.2	-1.0	554	0.00
	MP	17320	0	320.4	200.4	-5.2	407	0.00
	Maharashtra	26125	0	527.0	183.0	-6.7	567	0.00
	Goa	635	0	12.8	12.5	-0.3	40	0.00
	DNHDDPDCL	1074	0	24.7	25.3	-0.6	23	0.00
	AMNSIL	845	0	17.3	8.5	-0.2	226	0.00
	BALCO	518	0	12.4	12.5	-0.1	7	0.00
SR	Andhra Pradesh	11139	0	196.8	67.4	-2.0	492	0.00
	Telangana	12660	0	223.1	96.4	-1.8	847	0.00
	Karnataka	14652	0	261.6	112.5	-1.5	678	0.00
	Kerala	4146	0	84.1	70.9	1.2	240	0.00
	Tamil Nadu	15217	0	303.6	176.0	1.1	564	0.00
	Puducherry	352	0	7.9	7.7	-0.5	31	0.00
ER	Bihar	5090	0	93.7	89.4	-1.7	348	0.16
	DVC	3300	0	70.6	-43.0	-0.3	250	0.00
	Jharkhand	1690	121	31.6	24.5	-2.0	230	1.14
	Odisha	4632	0	87.7	33.6	-2.5	275	0.00
	West Bengal	6096	0	125.3	14.3	-3.2	389	0.00
	Sikkim	90	0	1.5	1.8	-0.4	12	0.00
Railways ER ISTS	20	0	0.1	0.1	0.0	30	0.00	
NER	Arunachal Pradesh	147	0	2.8	2.9	-0.1	24	0.00
	Assam	1378	0	24.8	19.7	-0.1	96	0.00
	Manipur	209	0	2.8	3.2	-0.4	27	0.17
	Meghalaya	295	12	6.0	5.2	-0.1	34	0.24
	Mizoram	114	0	1.8	1.7	-0.4	12	0.00
	Nagaland	130	0	2.3	2.3	-0.1	19	0.00
Tripura	225	0	3.7	3.0	-0.4	20	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-10.4	-5.8	-17.5	-15.5
Day Peak (MW)	-731.0	-328.0	-904.0	-771.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	281.9	-280.2	141.0	-143.4	0.6	0.0
Actual(MU)	274.3	-278.1	143.9	-146.8	-1.2	-7.9
O/D/U/D(MU)	-7.6	2.1	2.8	-3.4	-1.8	-7.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6518	8514	6248	4331	201	25812	45
State Sector	9231	11102	6825	3671	281	31109	55
Total	15749	19615	13073	8002	482	56921	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	692	1568	623	619	15	3517	78
Lignite	22	12	57	0	0	91	2
Hydro	99	39	47	14	9	209	5
Nuclear	25	53	75	0	0	153	3
Gas, Naptha & Diesel	14	20	7	0	26	66	1
RES (Wind, Solar, Biomass & Others)	125	122	197	3	1	449	10
Total	978	1815	1006	636	51	4486	100

Share of RES in total generation (%)	12.81	6.71	19.58	0.54	2.32	10.00
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	25.56	11.86	31.77	2.77	20.35	18.12

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.016
Based on State Max Demands	1.047

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	207953	11:14	827
Non-Solar hr	185474	17:56	12

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: 02-Jan-2024

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	1272	0.0	18.7	-18.7
4	765 kV	SASARAM-FATEHPUR	1	0	638	0.0	9.7	-9.7
5	765 kV	GAYA-BALIA	1	0	786	0.0	12.5	-12.5
6	400 kV	PUSAULI-VARANASI	1	63	13	0.4	0.0	0.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	111	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	778	0.0	10.3	-10.3
9	400 kV	PATNA-BALIA	2	0	606	0.0	9.7	-9.7
10	400 kV	NAUBATPUR-BALIA	2	0	644	0.0	10.1	-10.1
11	400 kV	BIHARSHARIF-BALIA	2	39	330	0.0	3.0	-3.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	569	0.0	9.4	-9.4
13	400 kV	BIHARSHARIF-VARANASI	2	0	533	0.0	7.8	-7.8
14	220 kV	SAHUPURI-KARAMNANA	1	0	127	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-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.8	95.6	-94.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	858	230	6.8	0.0	6.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	637	708	1.4	0.0	1.4
3	765 kV	JHARSUGUDA-DURG	2	0	1053	0.0	19.7	-19.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	702	0.0	11.1	-11.1
5	400 kV	RANCHI-SIPAT	2	145	278	0.0	0.8	-0.8
6	220 kV	BUDHIPADAR-RAIGARH	1	31	112	0.0	0.7	-0.7
7	220 kV	BUDHIPADAR-KORBA	2	136	111	0.3	0.0	0.3
ER-WR						8.4	32.3	-23.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	19	0.0	0.0	0.0
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1396	0.0	32.3	-32.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2745	0.0	52.9	-52.9
4	400 kV	TALCHER-I/C	2	622	411	10.7	0.0	10.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	85.2	-85.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	217	95	2.1	0.1	2.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	741	65	8.5	0.0	8.5
3	220 kV	ALIPURDUAR-SALAKATI	2	124	6	1.6	0.0	1.6
ER-NER						12.2	0.1	12.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	656	0	11.8	0.0	11.8
NER-NR						11.8	0.0	11.8
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	1	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	180	0	4.8	0.0	4.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	25.7	-25.7
4	765 kV	GWALIOR-AGRA	2	0	2717	0.0	44.1	-44.1
5	765 kV	GWALIOR-PHAGI	2	0	2496	0.0	43.6	-43.6
6	765 kV	JABALPUR-ORAI	2	0	1377	0.0	40.4	-40.4
7	765 kV	GWALIOR-ORAI	1	1081	0	19.0	0.0	19.0
8	765 kV	SATNA-ORAI	1	0	1342	0.0	25.1	-25.1
9	765 kV	BANASKANTHA-CHITORGARH	2	341	1029	0.9	5.4	-4.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	2979	0.0	47.6	-47.6
11	400 kV	ZERDA-KANKROLI	1	63	178	0.2	1.2	-0.9
12	400 kV	ZERDA -BHINMAL	1	303	414	0.9	2.6	-1.7
13	400 kV	VINDHYACHAL -RIHAND	1	973	0	21.3	0.0	21.3
14	400 kV	RAPP-SHUALPUR	2	3	680	0.0	7.0	-7.0
15	220 kV	BHANPURA-RANPUR	1	0	155	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	107	18	0.9	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	73	37	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						48.4	246.3	-197.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	18.1	-18.1
2	HVDC	RAIGARH-PUGALUR	2	0	1502	0.0	36.3	-36.3
3	765 kV	SOLAPUR-RAICHUR	2	1077	1507	3.0	8.6	-5.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2144	0.0	30.0	-30.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2363	0.0	32.9	-32.9
6	400 kV	KOLHAPUR-KUDGI	2	1265	0	16.9	0.0	16.9
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	111	2.1	0.0	2.1
WR-SR						21.9	125.8	-103.9

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)	-218	-5	-140	-3.35
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-234	173	-82	-1.96
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-239	-103	-181	-4.35
	NER	132kV GELEPHU-SALAKATI	-39	0	-28	-0.68
	NER	132kV MOTANGA-RANGIA	-13	0	-4	-0.09
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-73	0	-45	-1.07
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-328	0	-196	-4.71
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-790	-537	-632	-15.16
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-771	-412	-647	-15.54
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-114	0	-97	-2.32

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 02-Jan-2024

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	10.43	0.00	0.00	0.97	0.00	0.00	11.40
Nepal	0.28	0.00	3.19	0.00	0.00	0.88	0.00	0.00	4.35
Bangladesh	15.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.12
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	15.40	0.00	13.62	0.00	0.00	1.85	0.00	0.00	30.87

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
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	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54

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	0.54	0.00	-10.43	0.00	0.00	-0.97	0.00	0.00	-10.86
Nepal	-0.28	0.00	-3.19	0.00	0.00	-0.88	0.00	0.00	-4.35
Bangladesh	-15.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-15.12
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-14.86	0.00	-13.62	0.00	0.00	-1.85	0.00	0.00	-30.33