



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: 21st 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 20.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-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 20th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 21-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)	60312	61850	46448	21025	2586	192221
Peak Shortage (MW)	1136	15	0	943	197	2291
Energy Met (MU)	1321	1486	1158	449	48	4461
Hydro Gen (MU)	98	48	55	24	10	234
Wind Gen (MU)	10	50	49	-	-	109
Solar Gen (MU)*	110.28	61.45	98.22	4.66	1.15	276
Energy Shortage (MU)	15.69	5.55	0.00	5.18	1.76	28.18
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	67118	74064	57180	21792	2600	218071
Time Of Maximum Demand Met	12:45	10:34	09:44	18:02	18:28	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	0.028	0.00	0.08	3.70	3.78	80.13	16.09

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	9285	0	167.2	60.5	0.2	263	0.00
	Haryana	9080	58	164.4	94.8	1.9	281	6.17
	Rajasthan	17949	0	335.8	113.3	-0.5	265	5.18
	Delhi	5282	0	90.7	73.7	2.0	393	0.00
	UP	20722	0	403.8	122.1	-0.2	461	0.00
	Uttarakhand	2414	80	48.2	35.6	0.4	187	1.26
	HP	2235	10	38.3	32.1	1.3	315	0.64
	J&K(UT) & Ladakh(UT)	3000	0	64.4	58.6	1.6	306	2.44
	Chandigarh	300	0	5.1	4.7	0.4	94	0.00
Railways NR ISTS	181	0	3.3	3.3	0.0	32	0.00	
WR	Chhattisgarh	4985	73	103.5	54.6	-0.6	330	0.66
	Gujarat	21528	0	418.7	151.8	-3.0	579	0.00
	MP	17148	0	318.0	189.9	-1.7	1068	4.85
	Maharashtra	27842	0	572.1	167.4	1.2	837	0.00
	Goa	626	15	12.7	13.8	-1.5	94	0.04
	DNHDDPDCL	1259	0	29.3	29.3	0.0	37	0.00
	AMNSIL	911	0	18.9	8.3	0.5	295	0.00
	BALCO	522	0	12.4	12.5	-0.1	11	0.00
SR	Andhra Pradesh	11130	0	210.4	85.3	-1.4	575	0.00
	Telangana	13174	0	254.5	124.6	0.8	933	0.00
	Karnataka	15201	0	281.6	120.9	-2.3	768	0.00
	Kerala	4127	0	84.8	65.4	0.9	329	0.00
	Tamil Nadu	15468	0	317.8	189.2	-0.2	1113	0.00
	Puducherry	399	0	8.8	8.4	-0.2	21	0.00
ER	Bihar	5072	388	99.2	88.8	-1.1	300	1.64
	DVC	3363	0	71.7	-48.7	-0.8	311	0.00
	Jharkhand	1592	0	31.2	22.9	-0.3	288	3.54
	Odisha	4625	0	95.0	13.2	-1.0	347	0.00
	West Bengal	6963	0	149.8	18.9	-2.2	257	0.00
	Sikkim	114	0	1.9	2.1	-0.2	10	0.00
Railways ER ISTS	5	0	0.1	0.1	0.0	0	0.00	
NER	Arunachal Pradesh	176	0	3.0	2.7	0.2	58	0.00
	Assam	1430	167	27.0	21.0	0.9	186	1.33
	Manipur	205	9	3.1	2.8	0.3	43	0.43
	Meghalaya	391	0	6.4	4.7	-0.1	71	0.00
	Mizoram	150	0	2.3	1.6	-0.2	17	0.00
	Nagaland	136	0	2.2	2.1	0.0	32	0.00
Tripura	227	0	4.1	3.3	-0.1	35	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-9.1	-9.6	-17.2	-33.1
Day Peak (MW)	-694.0	-418.6	-899.0	-1524.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	280.4	-258.3	145.2	-173.6	6.3	0.0
Actual(MU)	284.2	-273.1	152.2	-176.7	6.7	-6.7
O/D/U/D(MU)	3.8	-14.8	7.0	-3.0	0.4	-6.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	8657	10684	4158	4516	651	28665	54
State Sector	5301	9574	7055	2189	281	24399	46
Total	13958	20258	11213	6705	932	53065	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	805	1611	713	684	11	3824	79
Lignite	33	20	59	0	0	112	2
Hydro	98	48	55	24	10	234	5
Nuclear	26	39	76	0	0	142	3
Gas, Naptha & Diesel	17	47	6	0	25	95	2
RES (Wind, Solar, Biomass & Others)	144	116	175	7	1	443	9
Total	1125	1881	1083	715	46	4850	100

Share of RES in total generation (%)	12.83	6.17	16.12	1.00	2.50	9.14
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.89	10.84	28.21	4.30	23.17	16.90

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.021
Based on State Max Demands	1.051

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	218071	10:27	3723
Non-Solar hr	198336	18:39	2781

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 -> 07:00 to 17:00hrs 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: 21-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	1.2	-1.2
3	765 kV	GAYA-VARANASI	2	0	867	0.0	15.2	-15.2
4	765 kV	SASARAM-FATEHPUR	1	0	523	0.0	10.1	-10.1
5	765 kV	GAYA-BALIA	1	0	889	0.0	15.1	-15.1
6	400 kV	PUSAULI-VARANASI	1	40	33	0.1	0.0	0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	82	0.0	0.9	-0.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	747	0.0	10.5	-10.5
9	400 kV	PATNA-BALIA	2	0	648	0.0	12.3	-12.3
10	400 kV	NAUBATPUR-BALIA	2	0	691	0.0	12.8	-12.8
11	400 kV	BIHARSHARIF-BALIA	2	0	373	0.0	6.4	-6.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	588	0.0	10.3	-10.3
13	400 kV	BIHARSHARIF-VARANASI	2	0	418	0.0	7.4	-7.4
14	220 kV	SAHUPURI-KARAMNANA	1	0	125	0.0	1.5	-1.5
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.4	103.6	-103.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1641	0.0	21.7	-21.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	356	901	0.0	8.6	-8.6
3	765 kV	JHARSUGUDA-DURG	2	0	768	0.0	15.4	-15.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	684	0.0	11.4	-11.4
5	400 kV	RANCHI-SIPAT	2	54	302	0.0	3.8	-3.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	143	0.0	1.9	-1.9
7	220 kV	BUDHIPADAR-KORBA	2	21	229	0.0	2.3	-2.3
ER-WR						0.0	65.0	-65.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	728	0.0	15.1	-15.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	3	0.0	0.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2590	0.0	48.0	-48.0
4	400 kV	TALCHER-I/C	2	1922	0	44.5	0.0	44.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	63.0	-63.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	176	64	1.1	0.1	1.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	612	0	6.1	0.0	6.1
3	220 kV	ALIPURDUAR-SALAKATI	2	102	0	1.1	0.0	1.1
ER-NER						8.4	0.1	8.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	657	0	15.7	0.0	15.7
NER-NR						15.7	0.0	15.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	4002	0.0	75.6	-75.6
2	HVDC	VINDHYACHAL B/B	-	430	0	8.6	0.0	8.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1452	0.0	17.3	-17.3
4	765 kV	GWALIOR-AGRA	2	0	3012	0.0	41.9	-41.9
5	765 kV	GWALIOR-PHAGI	2	0	1206	0.0	18.5	-18.5
6	765 kV	JABALPUR-ORAI	2	0	1264	0.0	27.3	-27.3
7	765 kV	GWALIOR-ORAI	1	870	0	13.4	0.0	13.4
8	765 kV	SATNA-ORAI	1	0	1426	0.0	22.8	-22.8
9	765 kV	BANASKANTHA-CHITORGARH	2	706	565	8.1	1.2	6.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3364	0.0	47.5	-47.5
11	400 kV	ZERDA-KANKROLI	1	113	114	0.8	0.4	0.5
12	400 kV	ZERDA -BHINMAL	1	397	321	2.3	1.4	0.9
13	400 kV	VINDHYACHAL -RIHAND	1	973	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUALPUR	2	54	666	0.1	3.9	-3.9
15	220 kV	BHANPURA-RANPUR	1	155	76	1.2	0.2	1.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	79	15	1.0	0.0	1.0
18	220 kV	MALANPUR-AURAIYA	1	45	36	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						58.0	259.4	-201.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	14.0	-14.0
2	HVDC	RAIGARH-PUGALUR	2	0	5011	0.0	64.0	-64.0
3	765 kV	SOLAPUR-RAICHUR	2	1560	1522	4.0	14.9	-10.9
4	765 kV	WARDHA-NIZAMABAD	2	0	2301	0.0	32.9	-32.9
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2333	0.0	34.4	-34.4
6	400 kV	KOLHAPUR-KUDGI	2	1714	0	19.3	0.0	19.3
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	1	85	0.6	0.0	0.5
WR-SR						23.9	160.1	-136.3

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)	-244	-22	-110	-2.64
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-275	245	-31	-0.73
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-232	-76	-168	-4.04
	NER	132kV GELEPHU-SALAKATI	-33	-16	-26	-0.63
	NER	132kV MOTANGA-RANGIA	18	0	5	0.13
NEPAL	NR	NEPAL IMPORT (FROM UP)	-70	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-70	0	-58	-1.40
	ER	NEPAL IMPORT (FROM BIHAR)	-51	0	-14	-0.34
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-368	-52	-330	-7.91
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-780	-302	-622	-14.94
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1524	-1198	-1377	-33.05
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-119	0	-93	-2.24

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 21-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	10.64	0.00	0.00	0.83	0.00	0.00	11.47
Nepal	0.23	0.00	6.84	0.00	0.00	0.13	0.00	0.00	7.20
Bangladesh	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.70
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	14.93	0.00	17.48	0.00	0.00	0.96	0.00	0.00	33.37

Import by India(in MU)

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

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	0.47	0.00	-10.64	0.00	0.00	-0.83	0.00	0.00	-11.00
Nepal	-0.23	0.00	-6.84	0.00	0.00	-0.13	0.00	0.00	-7.20
Bangladesh	-14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-14.70
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-14.46	0.00	-17.48	0.00	0.00	-0.96	0.00	0.00	-32.90