



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: 22nd 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 21.01.2024.

महोदय/Dear Sir,

आईंईंजींसीं-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-जनवरी-2024 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 21st January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 22-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)	60779	59625	42703	20585	2573	186265
Peak Shortage (MW)	261	0	0	593	0	854
Energy Met (MU)	1283	1443	1117	442	47	4333
Hydro Gen (MU)	95	52	45	21	9	222
Wind Gen (MU)	9	46	37	-	-	91
Solar Gen (MU)*	94.72	65.09	112.36	4.67	0.90	278
Energy Shortage (MU)	3.04	2.90	0.00	3.76	1.00	10.70
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65473	72341	55755	21174	2676	213206
Time Of Maximum Demand Met	12:30	10:58	09:46	18:43	17:51	10:58

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	0.031	0.00	0.19	3.30	3.48	79.09	17.43

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	9056	0	168.0	64.5	0.1	238	0.00
	Haryana	7853	150	151.1	86.2	1.3	398	1.42
	Rajasthan	17335	0	327.9	118.3	-0.3	464	0.00
	Delhi	5430	0	87.5	72.9	0.0	499	0.00
	UP	21302	0	391.3	118.7	0.1	831	0.00
	Uttarakhand	2371	0	46.6	33.8	1.0	156	0.42
	HP	2035	0	36.2	31.6	-0.1	115	0.27
	J&K(UT) & Ladakh(UT)	3076	95	66.0	61.4	0.4	263	0.93
	Chandigarh	286	0	5.1	4.9	0.2	64	0.00
Railways NR ISTS	173	0	3.1	3.4	-0.3	52	0.00	
WR	Chhattisgarh	4624	0	98.2	47.2	-1.3	415	0.00
	Gujarat	20487	0	397.0	149.1	-3.4	404	0.00
	MP	16906	628	319.6	187.9	-0.3	868	2.90
	Maharashtra	27055	0	556.9	161.3	-4.1	1183	0.00
	Goa	580	0	11.2	12.8	-2.0	60	0.00
	DNHDDPDCL	1208	0	28.4	28.4	0.0	74	0.00
	AMNSIL	880	0	19.7	9.8	0.2	284	0.00
	BALCO	520	0	12.4	12.4	0.0	10	0.00
SR	Andhra Pradesh	11831	0	211.3	87.6	-2.3	444	0.00
	Telangana	13443	0	250.8	121.4	-1.2	557	0.00
	Karnataka	13933	0	267.1	123.4	0.1	710	0.00
	Kerala	3919	0	78.2	64.3	0.9	336	0.00
	Tamil Nadu	14008	0	302.2	171.1	0.1	493	0.00
	Puducherry	356	0	8.1	7.8	-0.4	21	0.00
ER	Bihar	5236	211	103.4	92.7	-0.9	148	1.32
	DVC	3351	0	71.0	-49.4	-0.6	373	0.00
	Jharkhand	1669	215	31.6	23.6	-1.5	239	2.44
	Odisha	4388	0	92.3	13.6	-0.8	357	0.00
	West Bengal	6573	0	142.5	12.0	-1.9	131	0.00
	Sikkim	95	0	1.6	1.8	-0.2	13	0.00
Railways ER ISTS	2	0	0.0	0.1	-0.1	0	0.00	
NER	Arunachal Pradesh	173	0	3.0	2.9	0.0	45	0.00
	Assam	1462	0	26.3	20.7	0.7	156	0.29
	Manipur	227	0	3.0	2.9	0.2	39	0.71
	Meghalaya	347	0	6.2	5.0	-0.3	63	0.00
	Mizoram	144	0	2.2	1.5	-0.1	22	0.00
	Nagaland	140	0	2.1	2.1	-0.1	30	0.00
Tripura	228	0	3.9	3.0	-0.2	17	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-12.6	-9.9	-18.4	-32.1
Day Peak (MW)	-679.0	-599.1	-894.0	-1234.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	282.7	-251.8	132.4	-169.7	6.3	0.0
Actual(MU)	286.9	-260.5	136.6	-175.7	6.0	-6.5
O/D/U/D(MU)	4.2	-8.7	4.2	-6.0	-0.3	-6.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	8482	12014	4158	4612	651	29916	54
State Sector	6101	9689	7535	2256	281	25862	46
Total	14583	21703	11693	6868	932	55778	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	785	1573	691	684	11	3744	79
Lignite	33	18	57	0	0	108	2
Hydro	95	52	45	21	9	222	5
Nuclear	26	39	76	0	0	142	3
Gas, Naptha & Diesel	17	48	6	0	25	96	2
RES (Wind, Solar, Biomass & Others)	127	113	179	7	1	428	9
Total	1084	1843	1054	712	46	4740	100

Share of RES in total generation (%)	11.74	6.14	17.02	0.99	1.96	9.03
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	22.94	11.08	28.52	3.99	22.10	16.72

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.019
Based on State Max Demands	1.044

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	213206	10:58	1676
Non-Solar hr	191364	18:54	1021

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: 22-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	1.1	-1.1
3	765 kV	GAYA-VARANASI	2	0	930	0.0	16.2	-16.2
4	765 kV	SASARAM-FATEHPUR	1	0	531	0.0	9.8	-9.8
5	765 kV	GAYA-BALIA	1	0	903	0.0	15.7	-15.7
6	400 kV	PUSAULI-VARANASI	1	22	29	0.0	0.1	-0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	73	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	849	0.0	10.8	-10.8
9	400 kV	PATNA-BALIA	2	0	690	0.0	13.1	-13.1
10	400 kV	NAUBATPUR-BALIA	2	0	732	0.0	13.8	-13.8
11	400 kV	BIHARSHARIF-BALIA	2	0	432	0.0	6.6	-6.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	622	0.0	10.7	-10.7
13	400 kV	BIHARSHARIF-VARANASI	2	0	463	0.0	7.9	-7.9
14	220 kV	SAHUPURI-KARAMNANA	1	0	124	0.0	1.9	-1.9
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.6	0.0	0.6
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						0.6	108.6	-108.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1547	0.0	24.2	-24.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	826	814	0.0	6.9	-6.9
3	765 kV	JHARSUGUDA-DURG	2	0	760	0.0	14.9	-14.9
4	400 kV	JHARSUGUDA-RAIGARH	4	0	660	0.0	11.0	-11.0
5	400 kV	RANCHI-SIPAT	2	170	258	0.0	3.0	-3.0
6	220 kV	BUDHIPADAR-RAIGARH	1	3	119	0.0	1.5	-1.5
7	220 kV	BUDHIPADAR-KORBA	2	55	166	0.0	1.1	-1.1
ER-WR						0.0	62.6	-62.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	660	0.0	15.2	-15.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	3	0.0	0.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2642	0.0	45.2	-45.2
4	400 kV	TALCHER-I/C	2	1916	0	44.6	0.0	44.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	60.3	-60.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	178	61	1.2	0.1	1.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	597	0	6.6	0.0	6.6
3	220 kV	ALIPURDUAR-SALAKATI	2	102	0	1.3	0.0	1.3
ER-NER						9.0	0.1	9.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	662	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	3998	0.0	59.0	-59.0
2	HVDC	VINDHYACHAL B/B	-	430	0	12.1	0.0	12.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	914	0.0	21.4	-21.4
4	765 kV	GWALIOR-AGRA	2	0	3154	0.0	45.9	-45.9
5	765 kV	GWALIOR-PHAGI	2	0	1307	0.0	21.8	-21.8
6	765 kV	JABALPUR-ORAI	2	0	1392	0.0	35.3	-35.3
7	765 kV	GWALIOR-ORAI	1	945	0	16.0	0.0	16.0
8	765 kV	SATNA-ORAI	1	0	1167	0.0	21.6	-21.6
9	765 kV	BANASKANTHA-CHITORGARH	2	876	776	8.0	2.1	5.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	2988	0.0	44.8	-44.8
11	400 kV	ZERDA-KANKROLI	1	136	163	0.9	0.6	0.3
12	400 kV	ZERDA -BHINMAL	1	422	405	2.2	2.1	0.2
13	400 kV	VINDHYACHAL -RIHAND	1	974	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUJALPUR	2	102	742	0.2	6.3	-6.2
15	220 kV	BHANPURA-RANPUR	1	165	115	1.1	0.4	0.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	77	14	0.8	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	43	40	0.3	0.1	0.2
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						63.5	262.7	-199.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1008	0.0	12.7	-12.7
2	HVDC	RAIGARH-PUGALUR	2	0	4511	0.0	60.4	-60.4
3	765 kV	SOLAPUR-RAICHUR	2	1468	1770	4.8	13.1	-8.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2518	0.0	31.4	-31.4
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2463	0.0	30.1	-30.1
6	400 kV	KOLHAPUR-KUDGI	2	1499	0	19.1	0.0	19.1
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	0	0.0	0.0	0.0
WR-SR						23.9	147.7	-123.9

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)	-244	3	-166	-3.98
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-250	223	-90	-2.16
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-243	-80	-190	-4.56
	NER	132kV GELEPHU-SALAKATI	-36	-17	-28	-0.66
	NER	132kV MOTANGA-RANGIA	16	0	2	0.04
NEPAL	NR	NEPAL IMPORT (FROM UP)	0	0	0	0.40
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-76	0	-63	-1.52
	ER	NEPAL IMPORT (FROM BIHAR)	-111	-13	-22	-0.52
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-488	-48	-345	-8.28
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-782	-446	-673	-16.16
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1234	-1002	-1234	-32.05
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-112	0	-93	-2.22

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 22-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	12.14	0.00	0.00	0.66	0.00	0.00	12.80
Nepal	0.23	0.00	7.89	0.00	0.00	0.31	0.00	0.00	8.43
Bangladesh	16.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	16.27	0.00	20.03	0.00	0.00	0.97	0.00	0.00	37.27

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	-12.14	0.00	0.00	-0.66	0.00	0.00	-12.33
Nepal	-0.23	0.00	-7.89	0.00	0.00	-0.31	0.00	0.00	-8.43
Bangladesh	-16.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16.04
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-15.80	0.00	-20.03	0.00	0.00	-0.97	0.00	0.00	-36.80