



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: 24th 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 23.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-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 23rd January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 24-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)	59523	62295	47738	20511	2575	192642
Peak Shortage (MW)	1776	0	0	1478	120	3374
Energy Met (MU)	1290	1473	1187	443	48	4441
Hydro Gen (MU)	95	52	65	24	10	246
Wind Gen (MU)	10	46	42	-	-	98
Solar Gen (MU)*	92.86	62.90	119.51	4.68	1.05	281
Energy Shortage (MU)	28.38	0.45	0.00	9.35	1.20	39.38
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65588	73857	58387	21266	2651	217114
Time Of Maximum Demand Met	12:27	10:49	09:56	12:42	17:58	11:29

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	0.042	0.00	0.34	9.04	9.37	76.83	13.79

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	9197	0	168.2	54.9	-0.2	308	0.00
	Haryana	9315	0	165.5	102.4	1.2	233	6.82
	Rajasthan	17020	0	322.3	122.9	1.2	309	14.10
	Delhi	5391	0	91.4	79.9	0.1	369	0.00
	UP	21036	51	385.3	117.9	-0.5	500	0.79
	Uttarakhand	2483	0	47.2	33.9	1.1	247	1.34
	HP	2152	0	37.4	31.3	1.0	217	1.12
	J&K(UT) & Ladakh(UT)	3021	0	63.7	58.8	0.8	341	4.21
	Chandigarh	332	0	5.7	5.1	0.6	109	0.00
Railways NR ISTS	167	0	3.0	3.0	0.0	47	0.00	
WR	Chhattisgarh	4941	0	102.5	49.5	0.5	334	0.00
	Gujarat	20527	0	400.2	142.7	-1.7	540	0.00
	MP	16927	0	325.3	198.1	-3.4	777	0.45
	Maharashtra	27966	0	572.5	164.8	0.9	945	0.00
	Goa	660	0	13.0	12.6	-0.1	90	0.00
	DNHDDPDCL	1260	0	28.4	28.3	0.1	46	0.00
	AMNSIL	836	0	18.2	8.6	0.1	258	0.00
	BALCO	525	0	12.4	12.4	0.0	13	0.00
SR	Andhra Pradesh	12105	0	220.8	87.4	0.7	831	0.00
	Telangana	13396	0	255.8	133.6	1.3	804	0.00
	Karnataka	15446	0	286.3	128.4	1.4	854	0.00
	Kerala	4287	0	87.5	67.2	1.0	303	0.00
	Tamil Nadu	16134	0	328.0	177.1	-2.7	402	0.00
	Puducherry	422	0	8.9	8.8	-0.1	46	0.00
ER	Bihar	4961	0	95.7	85.7	-1.3	572	5.75
	DVC	3353	0	70.6	-46.8	-2.2	308	0.00
	Jharkhand	1658	160	32.2	22.1	0.3	365	3.61
	Odisha	4917	0	92.9	9.9	-0.6	493	0.00
	West Bengal	7183	0	150.0	20.7	-2.1	353	0.00
	Sikkim	122	0	2.0	2.1	-0.1	17	0.00
	Railways ER ISTS	6	0	0.1	0.1	-0.1	2	0.00
NER	Arunachal Pradesh	176	0	3.0	2.8	0.2	84	0.00
	Assam	1464	86	27.0	21.1	0.8	167	1.11
	Manipur	221	0	3.0	2.8	0.3	52	0.09
	Meghalaya	353	0	6.4	4.8	-0.2	65	0.00
	Mizoram	158	0	2.3	1.6	-0.2	15	0.00
	Nagaland	151	0	2.2	2.2	-0.1	27	0.00
	Tripura	241	0	4.1	3.3	0.1	16	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.5	-9.5	-19.4	-28.6
Day Peak (MW)	-590.6	-619.0	-1035.0	-1476.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	293.4	-292.1	152.3	-160.1	6.6	0.0
Actual(MU)	305.3	-320.2	163.4	-165.3	6.9	-10.0
O/D/U/D(MU)	11.9	-28.2	11.2	-5.2	0.3	-10.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	8268	9652	3938	5482	651	27990	53
State Sector	6501	8887	6775	2466	281	24909	47
Total	14768	18539	10713	7948	932	52900	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	786	1638	716	668	11	3820	79
Lignite	33	19	56	0	0	109	2
Hydro	95	52	65	24	10	246	5
Nuclear	26	40	68	0	0	134	3
Gas, Naptha & Diesel	17	49	6	0	25	98	2
RES (Wind, Solar, Biomass & Others)	126	111	197	7	1	443	9
Total	1085	1909	1108	699	47	4849	100

Share of RES in total generation (%)	11.63	5.83	17.77	1.00	2.22	9.13
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	22.85	10.64	29.76	4.44	22.49	16.96

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.021
Based on State Max Demands	1.061

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	217114	11:29	2252
Non-Solar hr	197598	18:45	4639

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: 24-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	845	0.0	15.3	-15.3
4	765 kV	SASARAM-FATEHPUR	1	0	514	0.0	10.3	-10.3
5	765 kV	GAYA-BALIA	1	0	852	0.0	15.3	-15.3
6	400 kV	PUSAULI-VARANASI	1	10	36	0.0	0.4	-0.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	59	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	807	0.0	10.4	-10.4
9	400 kV	PATNA-BALIA	2	0	572	0.0	10.8	-10.8
10	400 kV	NAUBATPUR-BALIA	2	0	604	0.0	11.3	-11.3
11	400 kV	BIHARSHARIFF-BALIA	2	0	406	0.0	6.0	-6.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	571	0.0	9.3	-9.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	406	0.0	7.0	-7.0
14	220 kV	SAHUPURI-KARAMNANA	1	0	137	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.5	0.0	0.5
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						0.5	99.7	-99.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1591	0.0	22.0	-22.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	757	725	0.0	4.5	-4.5
3	765 kV	JHARSUGUDA-DURG	2	0	761	0.0	14.7	-14.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	707	0.0	9.0	-9.0
5	400 kV	RANCHI-SIPAT	2	111	274	0.0	5.6	-5.6
6	220 kV	BUDHIPADAR-RAIGARH	1	5	148	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	16	188	0.0	1.8	-1.8
ER-WR						0.0	59.1	-59.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	625	0.0	14.3	-14.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	3	0.0	0.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2814	0.0	47.9	-47.9
4	400 kV	TALCHER-I/C	2	1934	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	62.2	-62.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	172	68	1.3	0.1	1.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	607	7	6.6	0.0	6.6
3	220 kV	ALIPURDUAR-SALAKATI	2	100	0	1.2	0.0	1.2
ER-NER						9.1	0.1	9.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	662	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	0	3002	0.0	68.5	-68.5
2	HVDC	VINDHYACHAL B/B	-	98	80	0.8	0.6	0.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1451	0.0	32.3	-32.3
4	765 kV	GWALIOR-AGRA	2	0	2483	0.0	37.4	-37.4
5	765 kV	GWALIOR-PHAGI	2	0	2096	0.0	35.9	-35.9
6	765 kV	JABALPUR-ORAI	2	0	1182	0.0	34.7	-34.7
7	765 kV	GWALIOR-ORAI	1	1091	0	18.3	0.0	18.3
8	765 kV	SATNA-ORAI	1	0	1132	0.0	22.1	-22.1
9	765 kV	BANASKANTHA-CHITORGARH	2	809	469	7.6	0.9	6.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	3009	0.0	44.4	-44.4
11	400 kV	ZERDA-KANKROLI	1	150	140	1.2	0.5	0.8
12	400 kV	ZERDA -BHINMAL	1	493	399	2.1	1.7	0.4
13	400 kV	VINDHYACHAL -RIHAND	1	971	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUALPUR	2	54	548	0.1	5.0	-5.0
15	220 kV	BHANPURA-RANPUR	1	155	89	1.3	0.3	1.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	93	0	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	68	21	0.5	0.1	0.4
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						54.8	285.5	-230.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	307	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	4509	0.0	75.9	-75.9
3	765 kV	SOLAPUR-RAICHUR	2	1387	2222	5.3	16.7	-11.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2934	0.0	38.7	-38.7
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2848	0.0	36.0	-36.0
6	400 kV	KOLHAPUR-KUDGI	2	1646	0	19.5	0.0	19.5
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	116	2.1	0.0	2.1
WR-SR						27.0	174.6	-147.6

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)	-267	-29	-156	-3.73
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-257	238	-30	-0.71
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-236	-52	-157	-3.76
	NER	132kV GELEPHU-SALAKATI	-30	-7	-16	-0.39
	NER	132kV MOTANGA-RANGIA	19	-4	5	0.12
NEPAL	NR	NEPAL IMPORT (FROM UP)	0	0	0	0.83
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-72	0	-62	-1.50
	ER	NEPAL IMPORT (FROM BIHAR)	-164	0	-26	-0.63
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-455	-31	-343	-8.22
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-917	-443	-709	-17.00
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1476	-854	-1193	-28.64
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-118	0	-100	-2.40

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 24-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	10.14	0.00	0.00	0.58	0.00	0.00	10.72
Nepal	0.24	0.00	7.49	0.00	0.00	0.19	0.00	0.00	7.92
Bangladesh	17.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.01
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	17.25	0.00	17.63	0.00	0.00	0.77	0.00	0.00	35.65

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
		IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
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	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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	0.46	0.00	-10.14	0.00	0.00	-0.58	0.00	0.00	-10.26
Nepal	-0.24	0.00	-7.49	0.00	0.00	-0.19	0.00	0.00	-7.92
Bangladesh	-17.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-17.01
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-16.79	0.00	-17.63	0.00	0.00	-0.77	0.00	0.00	-35.19