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, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 31st January 2024

To,

1. कार्यकारी निदेशक, पू.क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता - 700033
   Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. 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
3. 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
4. कार्यकारी निदेशक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग – 793006
   Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
5. 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 30.01.2024.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 30-जनवरी-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उप्लब्ध 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 30th January 2024, is available at the NLDC website.

धन्यवाद,

ग्रिड कंट्रलर ऑफ इंडिया लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

Report for previous day **Date of Reporting: 31-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)	56479	62389	48594	21168	2568	191198
Peak Shortage (MW)	666	109	0	1320	193	2288
Energy Met (MU)	1246	1506	1197	462	48	4460
Hydro Gen (MU)	89	62	51	24	9	236
Wind Gen (MU)	9	33	42	-	-	84
Solar Gen (MU)*	66.45	60.85	129.01	5.31	1.05	263
Energy Shortage (MU)	8.67	3.54	0.00	9.27	2.17	23.65
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	64525	74283	59346	21878	2603	219094
Time Of Maximum Demand Met	11:21	10:30	09:38	18:30	18:03	10:59

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	0.037	0.02	0.93	5.82	6.77	83.71	9.52

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	8290	0	156.5	47.9	-0.6	260	0.00
	Haryana	8489	0	156.6	95.8	-0.9	218	2.54
	Rajasthan	17155	0	329.2	135.9	-0.9	350	3.71
	Delhi	5176	0	86.8	71.0	0.6	385	0.00
	UP	18811	10	363.4	101.9	0.0	366	0.30
	Uttarakhand	2339	240	45.5	30.7	0.3	207	1.28
	HP	2084	0	37.1	31.5	1.1	225	0.00
	J&K(UT) & Ladakh(UT)	2877	0	63.2	58.8	0.6	473	0.84
	Chandigarh	292	0	4.7	4.5	0.2	75	0.00
	Railways_NR ISTS	161	0	3.2	3.6	-0.4	22	0.00
WR	Chhattisgarh	5254	0	108.4	43.2	0.3	302	0.00
	Gujarat	21021	0	411.6	148.4	-2.1	635	0.00
	MP	16774	147	323.4	200.3	-0.6	875	3.54
	Maharashtra	28479	0	587.8	168.1	1.4	1199	0.00
	Goa	663	0	13.3	12.6	0.3	69	0.00
	DNHDDPDCL	1294	0	29.5	29.6	-0.1	32	0.00
	AMNSIL	871	0	19.7	9.5	-0.1	294	0.00
	BALCO	525	0	12.5	12.5	0.0	11	0.00
SR	Andhra Pradesh	12051	0	222.5	85.9	-1.3	268	0.00
	Telangana	13243	0	252.8	122.7	-0.5	712	0.00
	Karnataka	15648	0	291.2	114.5	-1.7	526	0.00
	Kerala	4204	0	84.5	67.0	0.5	322	0.00
	Tamil Nadu	16617	0	337.3	168.1	-0.5	836	0.00
	Puducherry	418	0	8.9	8.6	-0.2	30	0.00
ER	Bihar	4727	800	95.5	84.1	-0.4	396	6.29
	DVC	3444	0	74.6	-48.8	1.4	278	0.00
	Jharkhand	1545	210	30.7	21.6	0.3	312	2.98
	Odisha	5192	0	107.3	15.8	-1.8	278	0.00
	West Bengal	7191	0	151.9	28.4	-2.0	221	0.00
	Sikkim	125	0	2.1	2.0	0.1	28	0.00
	Railways_ER ISTS	6	0	0.1	0.1	0.0	1	0.00
NER	Arunachal Pradesh	175	0	3.1	2.8	0.2	68	0.00
	Assam	1366	192	26.8	23.3	1.3	170	1.93
	Manipur	217	0	3.2	2.9	0.3	52	0.24
	Meghalaya	340	0	6.5	5.0	-0.1	324	0.00
	Mizoram	156	0	2.4	1.6	-0.1	35	0.00
	Nagaland	130	0	2.2	2.3	-0.1	40	0.00
	Tripura	235	0	4.1	3.6	-0.1	37	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-7.3	-11.7	-20.8	-28.9
Day Peak (MW)	-563.0	-688.1	-1054.0	-1332.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	274.8	-290.9	132.3	-124.5	8.3	0.0
Actual(MU)	279.5	-305.6	130.1	-122.7	9.5	-9.1
O/D/U/D(MU)	4.7	-14.7	-2.2	1.8	1.3	-9.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7301	9232	3828	6292	533	27186	53
State Sector	7571	9590	4025	2847	380	24411	47
Total	14872	18822	7853	9139	912	51597	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	776	1664	766	640	11	3857	79
Lignite	34	15	68	0	0	117	2
Hydro	89	62	51	24	9	236	5
Nuclear	31	40	52	0	0	123	3
Gas, Naptha & Diesel	24	62	6	0	23	114	2
RES (Wind, Solar, Biomass & Others)	98	98	201	7	1	406	8
Total	1052	1942	1144	671	44	4853	100

Share of RES in total generation (%)	9.33	5.06	17.57	1.05	2.39	8.36
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	20.86	10.39	26.57	4.59	23.76	15.79

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.016
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	219094	10:59	1905
Non-Solar hr	196660	18:44	2435

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: 31-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	579	0.0	10.0	-10.0
4	765 kV	SASARAM-FATEHPUR	1	0	424	0.0	7.9	-7.9
5	765 kV	GAYA-BALIA	1	0	683	0.0	12.9	-12.9
6	400 kV	PUSAULI-VARANASI	1	0	74	0.0	1.0	-1.0
7	400 kV	PUSAULI -ALLAHABAD	1	27	39	0.0	0.3	-0.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	36	495	0.0	5.7	-5.7
9	400 kV	PATNA-BALIA	2	0	416	0.0	8.0	-8.0
10	400 kV	NAUBATPUR-BALIA	2	0	437	0.0	8.0	-8.0
11	400 kV	BIHARSHARIFF-BALIA	2	78	219	0.0	2.7	-2.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	378	0.0	6.4	-6.4
13	400 kV	BIHARSHARIFF-VARANASI	2	0	276	0.0	3.8	-3.8
14	220 kV	SAHUPURI-KARAMNASA	1	0	99	0.0	1.2	-1.2
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	68.9	-68.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1392	0.0	19.9	-19.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1049	364	4.4	0.0	4.4
3	765 kV	JHARSUGUDA-DURG	2	0	740	0.0	14.3	-14.3
4	400 kV	JHARSUGUDA-RAIGARH	4	0	644	0.0	10.7	-10.7
5	400 kV	RANCHI-SIPAT	2	148	227	0.0	1.8	-1.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	163	0.0	2.6	-2.6
7	220 kV	BUDHIPADAR-KORBA	2	0	193	0.0	1.9	-1.9
					ER-WR	4.4	51.2	-46.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	504	0.0	11.4	-11.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	3	0.0	0.0	0.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2604	0.0	48.4	-48.4
4	400 kV	TALCHER-I/C	2	1924	0	44.1	0.0	44.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	59.8	-59.8
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	189	77	0.7	0.0	0.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	607	20	5.3	0.0	5.3
3	220 kV	ALIPURDUAR-SALAKATI	2	101	13	0.8	0.0	0.8
					ER-NER	6.7	0.0	6.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	704	0	16.7	0.0	16.7
					NER-NR	16.7	0.0	16.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3013	0.0	67.1	-67.1
2	HVDC	VINDHYACHAL B/B	-	250	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1263	0.0	31.5	-31.5
4	765 kV	GWALIOR-AGRA	2	0	2550	0.0	35.9	-35.9
5	765 kV	GWALIOR-PHAGI	2	0	1942	0.0	36.4	-36.4
6	765 kV	JABALPUR-ORAI	2	0	1204	34.7	0.0	34.7
7	765 kV	GWALIOR-ORAI	1	1048	0	18.8	0.0	18.8
8	765 kV	SATNA-ORAI	1	0	1112	0.0	21.1	-21.1
9	765 kV	BANASKANTHA-CHITORGARH	2	933	562	8.1	1.2	6.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	2970	0.0	44.5	-44.5
11	400 kV	ZERDA-KANKROLI	1	173	139	0.9	0.6	0.3
12	400 kV	ZERDA -BHINMAL	1	199	345	0.9	2.2	-1.3
13	400 kV	VINDHYACHAL -RIHAND	1	492	0	11.1	0.0	11.1
14	400 kV	RAPP-SHUJALPUR	2	70	529	0.1	5.4	-5.3
15	220 kV	BHANPURA-RANPUR	1	142	158	0.8	0.8	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.5	-1.5
17	220 kV	MEHGAON-AURAIYA	1	107	7	1.1	0.0	1.1
18	220 kV	MALANPUR-AURAIYA	1	73	23	0.6	0.1	0.6
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	83.2	248.1	-164.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	23.9	-23.9
2	HVDC	RAIGARH-PUGALUR	2	0	2504	0.0	49.4	-49.4
3	765 kV	SOLAPUR-RAICHUR	2	1407	1396	5.3	11.7	-6.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2294	0.0	29.9	-29.9
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2273	0.0	30.6	-30.6
6	400 kV	KOLHAPUR-KUDGI	2	1634	0	21.0	0.0	21.0
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	99	1.8	0.0	1.8
					WR-SR	28.1	145.4	-117.4

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 MANGDECHU HEP 4*180MW)	-247	22	-141	-3.38
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-245	196	-16	-0.39
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-225	-43	-133	-3.20
	NER	132kV GELEPHU-SALAKATI	-27	0	-23	-0.56
	NER	132kV MOTANGA-RANGIA	21	0	8	0.18
NEPAL	NR	NEPAL IMPORT (FROM UP)	-75	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-75	0	-62	-1.50
	ER	NEPAL IMPORT (FROM BIHAR)	-186	-32	-72	-1.72
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-502	-106	-351	-8.43
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-932	-450	-765	-18.35
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1332	-955	-1206	-28.94
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-122	0	-103	-2.46

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 31-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	9.45	0.00	0.00	0.10	0.00	0.00	9.55
Nepal	0.21	0.00	7.65	0.00	0.00	0.21	0.00	0.00	8.07
Bangladesh	18.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.15
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.36	0.00	17.10	0.00	0.00	0.31	0.00	0.00	35.77

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
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	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44

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	0.44	0.00	-9.45	0.00	0.00	-0.10	0.00	0.00	-9.11
Nepal	-0.21	0.00	-7.65	0.00	0.00	-0.21	0.00	0.00	-8.07
Bangladesh	-18.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.15
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-17.92	0.00	-17.10	0.00	0.00	-0.31	0.00	0.00	-35.33