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: 14th 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 13.01.2024.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 13-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 13th 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: 14-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)	58535	61519	44834	20750	2670	188308
Peak Shortage (MW)	595	0	0	1080	38	1713
Energy Met (MU)	1269	1478	1125	438	46	4357
Hydro Gen (MU)	91	36	58	20	11	215
Wind Gen (MU)	5	30	46	-	-	82
Solar Gen (MU)*	104.47	65.72	110.64	4.75	0.76	286
Energy Shortage (MU)	7.67	0.00	0.00	5.90	0.38	13.95
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	66230	73690	55790	21229	2765	217645
Time Of Maximum Demand Met	10:39	10:19	12:26	18:04	17:47	10:25

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	0.054	0.54	1.25	9.61	11.40	75.37	13.23

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	8744	0	161.0	63.2	-0.2	187	0.00
	Haryana	9075	0	164.9	98.4	1.0	242	1.28
	Rajasthan	17430	5	326.0	127.9	0.6	330	3.69
	Delhi	5316	0	87.3	73.7	-0.7	427	0.00
	UP	20257	186	371.8	107.6	0.0	665	1.32
	Uttarakhand	2452	0	47.0	38.0	-0.7	119	0.37
	HP	2079	0	37.0	31.2	0.5	244	0.00
	J&K(UT) & Ladakh(UT)	3016	90	65.2	60.6	0.1	267	1.01
	Chandigarh	303	0	5.1	4.9	0.2	105	0.00
	Railways_NR ISTS	194	0	3.4	3.3	0.1	47	0.00
WR	Chhattisgarh	5245	0	106.7	43.9	-0.4	159	0.00
	Gujarat	21520	0	420.7	162.4	-1.9	575	0.00
	MP	16101	0	297.2	173.9	-3.3	386	0.00
	Maharashtra	27693	0	579.3	183.7	2.8	895	0.00
	Goa	690	0	14.0	12.7	0.7	34	0.00
	DNHDDPDCL	1275	0	29.4	29.7	-0.3	20	0.00
	AMNSIL	859	0	18.4	9.6	-0.2	248	0.00
	BALCO	524	0	12.5	12.5	0.0	12	0.00
SR	Andhra Pradesh	11203	0	209.0	73.1	0.2	710	0.00
	Telangana	13488	0	249.8	115.3	3.1	952	0.00
	Karnataka	14511	0	269.1	111.7	0.9	1132	0.00
	Kerala	3993	0	78.9	62.9	-0.9	200	0.00
	Tamil Nadu	15107	0	309.2	166.2	1.2	855	0.00
	Puducherry	395	0	8.8	8.2	-0.2	20	0.00
ER	Bihar	5008	338	96.3	89.3	0.5	380	3.56
	DVC	3426	0	73.6	-44.2	-0.1	367	0.00
	Jharkhand	1653	0	31.4	22.6	-1.1	258	2.34
	Odisha	4718	0	94.2	18.5	-0.8	395	0.00
	West Bengal	6947	0	140.9	35.4	-6.7	266	0.00
	Sikkim	114	0	1.8	2.0	-0.2	5	0.00
	Railways_ER ISTS	10	0	0.1	0.1	0.0	0	0.00
NER	Arunachal Pradesh	171	0	2.6	2.6	-0.1	37	0.00
	Assam	1554	0	25.8	22.7	0.6	182	0.00
	Manipur	193	0	3.0	3.1	-0.1	28	0.13
	Meghalaya	342	38	6.4	5.4	-0.4	145	0.25
	Mizoram	151	0	2.3	1.7	-0.1	11	0.00
	Nagaland	162	0	2.3	2.3	-0.2	28	0.00
	Tripura	238	0	4.0	3.3	-0.2	18	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-9.3	-7.8	-18.9	-15.8
Day Peak (MW)	-574.0	-376.0	-1039.0	-770.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	290.4	-266.5	118.6	-145.0	2.5	0.0
Actual(MU)	286.6	-269.4	127.1	-156.0	1.1	-10.7
O/D/U/D(MU)	-3.8	-2.9	8.5	-11.1	-1.4	-10.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7442	9202	5998	4461	217	27320	50
State Sector	7781	12109	4165	3457	281	27793	50
Total	15222	21311	10163	7918	498	55113	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	783	1667	690	657	16	3813	80
Lignite	22	21	62	0	0	104	2
Hydro	91	36	58	20	11	215	5
Nuclear	22	24	76	0	0	122	3
Gas, Naptha & Diesel	19	24	6	0	26	75	2
RES (Wind, Solar, Biomass & Others)	133	98	183	7	1	422	9
Total	1069	1871	1075	683	54	4751	100

Share of RES in total generation (%)	12.48	5.25	16.99	1.00	1.42	8.88
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.00	8.46	29.45	3.87	21.77	15.97

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.009
Based on State Max Demands	1.039

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	217645	10:25	794
Non-Solar hr	194633	17:01	1036

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: 14-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	631	0.0	11.1	-11.1
4	765 kV	SASARAM-FATEHPUR	1	0	427	0.0	7.7	-7.7
5	765 kV	GAYA-BALIA	1	0	787	0.0	13.6	-13.6
6	400 kV	PUSAULI-VARANASI	1	26	49	0.0	0.3	-0.3
7	400 kV	PUSAULI -ALLAHABAD	1	1	74	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	663	0.0	8.1	-8.1
9	400 kV	PATNA-BALIA	2	0	616	0.0	12.0	-12.0
10	400 kV	NAUBATPUR-BALIA	2	0	658	0.0	11.8	-11.8
11	400 kV	BIHARSHARIFF-BALIA	2	0	342	0.0	4.9	-4.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	547	0.0	8.1	-8.1
13	400 kV	BIHARSHARIFF-VARANASI	2	0	365	0.0	6.1	-6.1
14	220 kV	SAHUPURI-KARAMNASA	1	1	117	0.0	1.1	-1.1
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	0.4	87.0	-86.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	26	1174	0.0	14.0	-14.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	680	680	0.0	2.3	-2.3
3	765 kV	JHARSUGUDA-DURG	2	0	700	0.0	13.8	-13.8
4	400 kV	JHARSUGUDA-RAIGARH	4	0	619	0.0	8.4	-8.4
5	400 kV	RANCHI-SIPAT	2	140	242	0.0	1.4	-1.4
6	220 kV	BUDHIPADAR-RAIGARH	1	23	134	0.0	1.5	-1.5
7	220 kV	BUDHIPADAR-KORBA	2	93	75	0.6	0.0	0.6
					ER-WR	0.6	41.5	-40.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	327	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1294	0.0	31.3	-31.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2551	0.0	46.5	-46.5
4	400 kV	TALCHER-I/C	2	629	0	13.7	0.0	13.7
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	157	119	1.7	0.2	1.5
2	400 kV	ALIPURDUAR-BONGAIGAON	2	569	125	7.1	0.0	7.1
3	220 kV	ALIPURDUAR-SALAKATI	2	104	32	0.9	0.0	0.9
					ER-NER	9.6	0.2	9.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	657	0	11.1	0.0	11.1
					NER-NR	11.1	0.0	11.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	3009	0.0	71.1	-71.1
2	HVDC	VINDHYACHAL B/B	-	90	0	2.4	0.0	2.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1452	0.0	34.9	-34.9
4	765 kV	GWALIOR-AGRA	2	0	2688	0.0	40.4	-40.4
5	765 kV	GWALIOR-PHAGI	2	0	1308	0.0	22.4	-22.4
6	765 kV	JABALPUR-ORAI	2	0	1216	0.0	26.2	-26.2
7	765 kV	GWALIOR-ORAI	1	954	0	13.3	0.0	13.3
8	765 kV	SATNA-ORAI	1	0	1297	0.0	24.0	-24.0
9	765 kV	BANASKANTHA-CHITORGARH	2	1243	383	13.3	0.6	12.8
10	765 kV	VINDHYACHAL-VARANASI	2	0	3221	0.0	46.3	-46.3
11	400 kV	ZERDA-KANKROLI	1	196	82	1.7	0.2	1.5
12	400 kV	ZERDA -BHINMAL	1	479	325	2.5	1.3	1.2
13	400 kV	VINDHYACHAL -RIHAND	1	984	0	22.3	0.0	22.3
14	400 kV	RAPP-SHUJALPUR	2	259	593	0.5	4.2	-3.7
15	220 kV	BHANPURA-RANPUR	1	0	163	0.0	2.7	-2.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.2	-1.2
17	220 kV	MEHGAON-AURAIYA	1	50	2	0.1	0.0	0.1
18	220 kV	MALANPUR-AURAIYA	1	96	24	0.6	0.1	0.5
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	56.7	275.4	-218.7
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1008	0.0	10.5	-10.5
2	HVDC	RAIGARH-PUGALUR	2	0	3004	0.0	26.5	-26.5
3	765 kV	SOLAPUR-RAICHUR	2	1548	1239	4.6	8.9	-4.3
4	765 kV	WARDHA-NIZAMABAD	2	0	2407	0.0	36.1	-36.1
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2383	0.0	36.3	-36.3
6	400 kV	KOLHAPUR-KUDGI	2	1644	0	22.1	0.0	22.1
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	0	106	1.6	0.0	1.6
					WR-SR	28.4	118.2	-89.9

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 MANGDECHU HEP 4*180MW)	-227	31	-127	-3.05
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-256	199	-75	-1.79
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-232	-79	-172	-4.13
	NER	132kV GELEPHU-SALAKATI	-32	-13	-25	-0.59
	NER	132kV MOTANGA-RANGIA	24	0	10	0.24
NEPAL	NR	NEPAL IMPORT (FROM UP)	-73	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-73	0	-56	-1.34
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-376	-68	-269	-6.46
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-922	-336	-696	-16.70
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-770	-399	-658	-15.80
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-117	0	-91	-2.18

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 14-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	9.25	0.00	0.00	0.77	0.00	0.00	10.02
Nepal	0.26	0.00	6.52	0.00	0.00	0.09	0.00	0.00	6.87
Bangladesh	16.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.63
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	16.89	0.00	15.77	0.00	0.00	0.86	0.00	0.00	33.52

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
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	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50

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	0.50	0.00	-9.25	0.00	0.00	-0.77	0.00	0.00	-9.52
Nepal	-0.26	0.00	-6.52	0.00	0.00	-0.09	0.00	0.00	-6.87
Bangladesh	-16.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16.63
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-16.39	0.00	-15.77	0.00	0.00	-0.86	0.00	0.00	-33.02