

National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र **GRID CONTROLLER OF INDIA LIMITED** ग्रिड कंटोलर ऑफ इंडिया लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 12th 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., एफ ३-, एम आई डी सी क्षेत्र , अंधेरी, मुंबई –४०००९३ 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 12.01.2024.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 12-जनवरी-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ 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 12th January 2024, is available at the NLDC website.

धन्यवाद.

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



Report for previous day

A. Power Supply Position at All India and Regional level

Date of Reporting: 13-Jan-2024

4. I ower Supply I ostuon at An India and Regional level									
	NR	WR	SR	ER	NER	TOTAL			
Demand Met during Evening Peak hrs(MW) (at 19:00 hrs; from RLDCs)	61844	61492	45538	21198	2500	192572			
Peak Shortage (MW)	130	0	0	562	46	738			
Energy Met (MU)	1299	1470	1126	446	47	4388			
Hydro Gen (MU)	94	32	44	18	12	199			
Wind Gen (MU)	9	49	114	-	-	172			
Solar Gen (MU)*	122.54	64.37	115.31	5.53	0.73	308			
Energy Shortage (MU)	2.49	0.00	0.00	2.56	0.64	5.69			
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68801	73098	57344	22261	2763	219800			
Time Of Maximum Demand Met	11:31	10:53	09:29	18:13	17:45	10:57			

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	0.044	0.10	0.21	5 12	5.54	74.05	20.40

C. Power Supply Position in States

		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the	maximum	(MU)	Schedule	(MU)	(MW)	Shortage (MU)
		day (MW)	Demand (MW)	(MU)	(MU)	(MU)	(IVI VV)	
	Punjab	9180	0	168.6	69.8	1.4	283	0.00
	Haryana	9134	0	166.1	100.5	-0.7	141	1.73
	Rajasthan	17631	0	330.4	125.3	-1.2	320	0.00
	Delhi	5665	0	95.4	79.4	1.9	409	0.00
NR	UP	21511	0	377.6	123.3	-0.8	1514	0.00
	Uttarakhand	2472	0	48.8	38.1	0.8	132	0.22
	HP	2131	0	37.7	32.2	0.3	112	0.03
	J&K(UT) & Ladakh(UT)	3107	25	66.2	62.0	-0.3	179	0.51
	Chandigarh	336	0	5.7	5.2	0.5	77	0.00
	Railways_NR ISTS	178	0	3.1	3.4	-0.3	76	0.00
	Chhattisgarh	5271	0	107.6	48.1	0.0	455	0.00
	Gujarat	21861	0	426.1	160.3	-0.2	829	0.00
	MP	15574	0	289.4	176.7	-4.3	991	0.00
WR	Maharashtra	27655	0	576.4	179.0	0.6	1210	0.00
	Goa	667	0	11.9	13.4	-2.1	132	0.00
	DNHDDPDCL	1285	0	29.3	29.3	0.0	147	0.00
	AMNSIL	757	0	16.8	8.8	-0.3	266	0.00
	BALCO	525	0	12.5	12.7	-0.2	13	0.00
	Andhra Pradesh	11506	0	211.9	62.1	-1.4	560	0.00
	Telangana	13510	0	251.8	122.0	0.9	788	0.00
SR	Karnataka	14378	0	261.8	100.5	-2.3	530	0.00
	Kerala	4065	0	80.8	64.8	0.8	285	0.00
	Tamil Nadu	15373	0	311.4	167.4	-2.9	584	0.00
	Puducherry	406	0	8.6	8.3	-0.5	33	0.00
	Bihar	5181	182	99.1	90.0	-1.2	351	0.87
	DVC	3375	0	71.8	-42.4	0.0	388	0.00
	Jharkhand	1649	0	31.7	22.8	-1.0	149	1.69
ER	Odisha	4817	0	96.3	19.5	-0.9	491	0.00
	West Bengal	7028	0	145.0	31.9	-3.0	204	0.00
	Sikkim	122	0	2.0	2.1	-0.1	11	0.00
	Railways_ER ISTS	9	0	0.1	0.1	0.0	0	0.00
	Arunachal Pradesh	170	0	2.7	2.8	-0.2	51	0.00
	Assam	1424	0	26.0	23.2	-1.8	141	0.00
	Manipur	207	30	3.1	3.2	-0.1	26	0.35
NER	Meghalaya	358	0	6.6	5.3	-0.2	108	0.29
	Mizoram	129	0	2.3	1.7	-0.1	9	0.00
	Nagaland	149	0	2.3	2.3	-0.1	20	0.00
	Tripura	223	0	3.9	3.2	-0.4	9	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-9.3	-7.7	-16.8	-15.6
Day Peak (MW)	-578.0	-482.0	-1072.0	-767.0

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

	NR	WR	SR	$\mathbf{E}\mathbf{R}$	NER	TOTAL
Schedule(MU)	301.9	-288.9	117.8	-134.0	3.2	0.0
Actual(MU)	305.0	-281.8	108.9	-140.2	1.4	-6.7
O/D/U/D(MU)	3.1	7.2	-8.9	-6.3	-1.8	-6.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7681	8859	4338	4461	217	25556	50
State Sector	7071	9989	5425	2832	281	25598	50
Total	14752	18848	9763	7293	498	51154	100

G. Sourcewise generation (Gross) (MU)

, , , ,	NR	WR	SR	ER	NER	All India	% Share
Coal	770	1657	649	646	16	3738	78
Lignite	24	21	61	0	0	106	2
Hydro	94	32	44	18	12	199	4
Nuclear	22	24	76	0	0	122	3
Gas, Naptha & Diesel	20	24	5	0	26	75	2
RES (Wind, Solar, Biomass & Others)	155	116	255	8	1	534	11
Total	1084	1874	1090	672	54	4774	100
		ı	1	I	I		1
Share of RES in total generation (%)	14.29	6.19	23.40	1.15	1.36	11.20	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.92	9.17	34.44	3.83	22.88	17.92	

H. All India Demand Diversity Factor	
D1 D1-M D1-	т

Based on Regional Max Demands	1.020
Based on State Max Demands	1.041

I. All India Peak	Demand ar	nd shortage	at Solar and l	Non-Solar Hour
	ì	D 117	A CR STEEL	

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	219800	10:57	637
Non-Solar hr	199251	18:30	605

 $Diversity\ factor = Sum\ of\ regional\ or\ state\ maximum\ demands\ /\ All\ India\ maximum\ demand$

^{**}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

 $[*]Source: RLDCs \ for \ solar \ connected \ to \ ISTS; SLDCs \ for \ embedded \ solar. \ Limited \ visibility \ of \ embedded \ solar \ data.$

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 13-Jan-2024

Sl No Voltage Level	Line Details	No. of Circuit	Man Immant (MIV)	Max Export (MW)	Immort (MII)	Export (MU)	NET (MU)
		No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MC)	NEI (MU)
Import/Export of ER 1 HVDC	(With NR) 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	712	0.0	10.5	-10.5
4 765 kV 5 765 kV	SASARAM-FATEHPUR GAYA-BALIA	1	0	490 864	0.0	7.8 13.5	-7.8 -13.5
6 400 kV	PUSAULI-VARANASI	1	41	38	0.0	0.0	0.0
7 400 kV 8 400 kV	PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	1 2	0	87 802	0.0	1.2 8.8	-1.2 -8.8
9 400 kV	PATNA-BALIA	2	0	651	0.0	10.7	-10.7
10 400 kV	NAUBATPUR-BALIA	2	0	694	0.0	11.1	-11.1
11 400 kV 12 400 kV	BIHARSHARIFF-BALIA MOTIHARI-GORAKHPUR	2 2	0	412 598	0.0	5.1 8.7	-5.1 -8.7
13 400 kV	BIHARSHARIFF-VARANASI	2	0	399	0.0	5.7	-5.7
14 220 kV 15 132 kV	SAHUPURI-KARAMNASA NAGAR UNTARI-RIHAND	1	7	106 0	0.0 0.1	1.0 0.0	-1.0 0.1
16 132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
17 132 kV 18 132 kV	KARMANASA-SAHUPURI KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
16 132 KV	RARMANASA-CHANDAULI	1	U	ER-NR	0.6	85.1	-84.5
Import/Export of ER	(With WR)					,11	
1 765 kV	JHARSUGUDA-DHARAMJAIGARH	4	16	1028	0.0	10.5	-10.5
2 765 kV 3 765 kV	NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	2 2	834	590 659	4.7 0.0	0.0 12.1	4.7 -12.1
4 400 kV	JHARSUGUDA-RAIGARH	4	0	652	0.0	7.6	-7.6
5 400 kV 6 220 kV	RANCHI-SIPAT BUDHIPADAR-RAIGARH	1	179 17	193 132	0.0	0.5 1.3	-0.5 -1.3
7 220 kV	BUDHIPADAR-KORBA	2	94	86	0.2	0.0	0.2
				ER-WR	5.0	31.9	-26.9
Import/Export of ER				220	0.0	7.2	
1 HVDC 2 HVDC	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	2 2	0	330 1984	0.0	7.3 37.8	-7.3 -37.8
3 765 kV	ANGUL-SRIKAKULAM	2	0	2368	0.0	42.4	-42.4
4 400 kV 5 220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	2	624	221 0	5.9	0.0	5.9 0.0
220 R 1		· · · · · · · · · · · · · · · · · · ·		ER-SR	0.0	87.5	-87.5
Import/Export of ER				•		•	
1 400 kV 2 400 kV	BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	2 2	266 822	128 172	2.6 9.5	0.1	2.4 9.5
3 220 kV	ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	2 2	822 126	172 45	9.5 1.6	0.0	1.6
	•			ER-NER	13.6	0.1	13.4
Import/Export of NE							
1 HVDC	BISWANATH CHARIALI-AGRA	2	667	0 NER-NR	15.1 15.1	0.0	15.1 15.1
Import/Export of WF	R (With NR)			NEK-NK	15.1	U.U	15.1
1 HVDC	CHAMPA-KURUKSHETRA	2	0	3105	0.0	65.1	-65.1
2 HVDC	VINDHYACHAL B/B	:	90	0	2.4	0.0	2.4
3 HVDC 4 765 kV	MUNDRA-MOHINDERGARH GWALIOR-AGRA	2 2	0	1452 3433	0.0	27.2 49.2	-27.2 -49.2
5 765 kV	GWALIOR-PHAGI	2	0	1545	0.0	22.7	-22.7
6 765 kV 7 765 kV	JABALPUR-ORAI GWALIOR-ORAI	1	0 921	1511 0	0.0 14.6	38.2 0.0	-38.2 14.6
8 765 kV	SATNA-ORAI	1	0	1337	0.0	24.0	-24.0
9 765 kV	BANASKANTHA-CHITORGARH	2 2	1007	1108	8.6	1.8 52.7	6.8
10 765 kV 11 400 kV	VINDHYACHAL-VARANASI ZERDA-KANKROLI	1	146	3370 195	0.0 1.1	0.4	-52.7 0.7
12 400 kV	ZERDA -BHINMAL	1	465	500	2.8	1.8	1.0
13 400 kV 14 400 kV	VINDHYACHAL -RIHAND RAPP-SHUJALPUR	1 2	973 180	0 770	22.0 0.5	0.0 4.5	22.0 -4.0
15 220 kV	BHANPURA-RANPUR	1	0	155	0.0	2.6	-2.6
16 220 kV 17 220 kV	BHANPURA-MORAK MEHGAON-AURAIYA	1	75	30 15	0.0	1.2 0.0	-1.2
17 220 kV 18 220 kV	MALANPUR-AURAIYA MALANPUR-AURAIYA	1	54	50	0.0	0.0	0.3 -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 WR-NR	0.0 52.2	0.0 291.6	0.0 -239.4
Import/Export of WF	R (With SR)			VV K-11K	54,4	291.0	-239.4
1 HVDC	BHADRAWATI B/B	-	0	1008	0.0	12.1	-12.1
2 HVDC 3 765 kV	RAIGARH-PUGALUR SOLAPUR-RAICHUR	2 2	0 1749	4007 667	0.0 10.6	32.2 2.7	-32.2 7.9
4 765 kV	WARDHA-NIZAMABAD	2	0	2066	0.0	30.3	-30.3
5 765 kV	WARORA-WARANGAL(NEW)	2	0	2015	0.0	29.2	-29.2
6 400 kV 7 220 kV	KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	2 2	1688	0	26.2 0.0	0.0	26.2 0.0
8 220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
9 220 kV	XELDEM-AMBEWADI	1	1	125 WR-SR	1.8 38.6	0.0 106.4	1.8 -67.8
		mpps://mvos::	OTT A NICES	WK-5K	30.0		
		TERNATIONAL EX		ı		1	(+ve)/Export(-ve) Energy Exchange
State	Region		Name	Max (MW)	Min (MW)	Avg (MW)	(MU)
	ER	400kV MANGDECHHU- ALIPURDUAR RECEIP		-190	24	-109	-2.61
	EK	HEP 4*180MW)	,	-190	24	-107	-4.01
		400kV TALA-BINAGUR		2.12	404	00	
	ER	MALBASE - BINAGUR RECEIPT (from TALA H		-242	194	-88	-2.11
		220kV CHÚKHA-BIRPA	RA 1&2 (& 220kV				
BHUTAN	ER	MALBASE - BIRPARA)		-238	-94	-177	-4.25
		(from CHUKHA HEP 4*8	54MW)			+	
	NER	132kV GELEPHU-SALA	KATI	-36	-16	-25	-0.59
	NER	132kV MOTANGA-RAN	GIA	26	-1	12	0.28
	+	1				 	
	NR	NEPAL IMPORT (FROM	I UP)	-69	0	0	0.00
		, , , , ,			•	<u> </u>	
NEPAL	NR	132kV MAHENDRANAG	AR-TANAKPUR(NHPC)	-69	0	-55	-1.32
	4143	- Dania	ca(mi c)	-07			-1.02
	ED	NEPAL IMPORT (EDG)	(RIHAP)	0	-	Δ.	0.00
	ER	NEPAL IMPORT (FROM	I DIFFAR)	0	0	0	0.00
		4001-77 75-7-	117 A DEL 2001				
	ER	400kV DHALKEBAR-M	UZAFFARPUR 1&2	-482	-166	-264	-6.33
	<u> </u>					<u> </u>	<u> </u>
	ER	BHERAMARA B/B HVD	C (B'DESH)	-922	-329	-613	-14.72
	770	1				+	
BANGLADESH	ER	400kV GODDA_TPS-RA	HANDLID (B'DESH) D/C	-767	-447	-651	-15.62
	(Isolated from Indian Crid)	TOOK T GODDII_II D-KII	HAM CK (B DESH) D/C	-707			
	(Isolated from Indian Grid)	TOOK GODDILLIS-KI	HAVI CK (B DESII) D/C	-707			
	(Isolated from Indian Grid) NER	132kV COMILLA-SURA		-150	0	-85	-2.04
	,				0	-85	-2.04

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 13-Jan-2024

Export From India (in MU)

		T-GNA							
Country	GNA (ISGS/PPA)	COLLECTIVE							
		BILATERAL TOTAL	IDAM			RTM			TOTAL
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.00	0.00	10.93	0.00	0.00	0.00	0.00	0.00	10.93
Nepal	0.25	0.00	7.27	0.00	0.00	0.00	0.00	0.00	7.52
Bangladesh	14.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.71
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	14.96	0.00	18.20	0.00	0.00	0.00	0.00	0.00	33.16

Import by India(in MU)

Import by muit		1							1
		T-GNA							
	GNA	COLLECTIVE							
Country	(ISGA/PPA)	BILATERAL	IDAM			RTM			TOTAL
		TOTAL	IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38
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	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38

-ve : Export / +ve : Import Net from India(in MU) T-GNA **GNA** COLLECTIVE (ISGS/PPA) IDAM TOTAL BILATERAL RTM Country TOTAL IEX PXIL HPX IEX PXIL HPX 1.38 0.00 -10.93 0.000.00 0.000.00 -9.55 Bhutan 0.00-0.25 0.00 -7.27 0.00 0.00 0.000.00 0.00-7.52 Nepal -14.71 0.00Bangladesh 0.000.000.000.000.000.00-14.71 0.00 0.000.00 0.000.00 0.000.00 0.000.00Myanmar **Total Net** -13.58 0.00 -18.20 0.00 0.000.00 0.00-31.78 0.00