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: 05th 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 04.01.2024.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-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 04th 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: 05-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)	59020	59581	44964	19770	2597	185932
Peak Shortage (MW)	118	0	0	1000	43	1161
Energy Met (MU)	1209	1441	1128	422	48	4248
Hydro Gen (MU)	101	44	59	16	11	231
Wind Gen (MU)	18	76	48	-	-	142
Solar Gen (MU)*	84.53	50.28	77.92	5.29	1.14	219
Energy Shortage (MU)	13.19	0.46	0.00	6.16	0.58	20.39
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	61670	72155	57476	20659	2707	208037
Time Of Maximum Demand Met	12:42	10:15	09:40	18:12	18:01	10:23

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	0.038	0.00	0.60	7.35	7.95	78.64	13.41

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	7874	0	150.3	60.0	-0.2	247	0.00
	Haryana	8570	128	159.3	99.4	0.0	300	1.34
	Rajasthan	16836	0	317.8	124.2	0.9	300	8.54
	Delhi	5159	0	87.6	78.4	-0.2	320	0.00
	UP	19713	0	342.6	123.4	-5.6	816	2.18
	Uttarakhand	2333	0	43.5	32.3	1.2	190	0.70
	HP	2079	0	37.5	30.7	0.1	173	0.03
	J&K(UT) & Ladakh(UT)	2977	0	62.9	57.8	0.5	227	0.40
	Chandigarh	290	0	4.8	4.5	0.3	91	0.00
	Railways_NR ISTS	162	0	3.3	3.1	0.2	37	0.00
WR	Chhattisgarh	5012	0	101.6	43.1	-0.7	299	0.00
	Gujarat	20395	0	398.4	155.9	-0.2	534	0.00
	MP	16511	0	303.9	188.8	-5.0	389	0.00
	Maharashtra	27492	461	564.6	181.2	-6.3	1070	0.46
	Goa	692	0	13.8	13.6	-0.3	69	0.00
	DNHDDPDCL	1255	0	28.9	28.9	0.0	56	0.00
	AMNSIL	799	0	17.2	8.1	0.0	240	0.00
	BALCO	521	0	12.4	12.5	-0.1	11	0.00
SR	Andhra Pradesh	10976	0	202.9	78.1	-0.3	717	0.00
	Telangana	13166	0	237.8	107.0	-0.8	613	0.00
	Karnataka	14481	0	262.8	108.7	-1.2	696	0.00
	Kerala	4163	0	83.6	64.8	0.9	389	0.00
	Tamil Nadu	16138	0	332.7	200.0	0.0	566	0.00
	Puducherry	398	0	8.5	8.2	-0.3	44	0.00
ER	Bihar	4698	370	91.1	80.0	-0.4	352	3.11
	DVC	3314	0	70.8	-52.9	-0.7	276	0.00
	Jharkhand	1592	0	31.1	22.1	-0.9	309	3.05
	Odisha	4507	0	87.1	22.2	-2.4	271	0.00
	West Bengal	6742	0	139.6	18.3	-1.3	231	0.00
	Sikkim	119	0	1.9	2.1	-0.1	9	0.00
	Railways_ER ISTS	12	0	0.1	0.1	0.0	0	0.00
NER	Arunachal Pradesh	168	0	2.8	2.6	0.1	35	0.00
	Assam	1535	0	27.3	21.0	1.0	138	0.00
	Manipur	199	20	3.0	2.8	0.2	51	0.25
	Meghalaya	347	34	6.4	4.6	-0.1	67	0.33
	Mizoram	142	0	2.1	1.8	-0.3	20	0.00
	Nagaland	154	0	2.3	2.1	0.1	25	0.00
	Tripura	239	0	4.4	3.2	-0.3	18	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.8	-6.2	-20.7	-15.4
Day Peak (MW)	-655.2	-463.0	-1026.0	-766.8

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	283.1	-295.3	154.9	-147.0	4.3	0.0
Actual(MU)	278.1	-300.7	169.2	-154.4	4.0	-3.8
O/D/U/D(MU)	-5.0	-5.4	14.3	-7.4	-0.3	-3.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6454	8579	5438	5581	540	26591	48
State Sector	8906	11307	5825	2324	281	28642	52
Total	15360	19885	11263	7905	821	55233	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	725	1622	686	636	12	3682	79
Lignite	32	9	59	0	0	100	2
Hydro	101	44	59	16	11	231	5
Nuclear	26	46	76	0	0	148	3
Gas, Naptha & Diesel	19	26	7	0	26	77	2
RES (Wind, Solar, Biomass & Others)	126	130	153	8	1	419	9
Total	1029	1877	1040	660	49	4656	100

Share of RES in total generation (%)	12.26	6.94	14.74	1.16	2.31	8.99
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.65	11.69	27.72	3.61	25.02	17.13

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.031
Based on State Max Demands	1.065

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	208037	10:23	3265
Non-Solar hr	192302	17:48	1641

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: 05-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	1072	0.0	17.8	-17.8
4	765 kV	SASARAM-FATEHPUR	1	0	508	0.0	8.4	-8.4
5	765 kV	GAYA-BALIA	1	0	867	0.0	13.4	-13.4
6	400 kV	PUSAULI-VARANASI	1	53	29	0.6	0.0	0.6
7	400 kV	PUSAULI -ALLAHABAD	1	0	102	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	727	0.0	9.7	-9.7
9	400 kV	PATNA-BALIA	2	0	546	0.0	9.5	-9.5
10	400 kV	NAUBATPUR-BALIA	2	0	580	0.0	9.7	-9.7
11	400 kV	BIHARSHARIFF-BALIA	2	0	317	0.0	4.0	-4.0
12	400 kV	MOTIHARI-GORAKHPUR	2	0	498	0.0	8.0	-8.0
13	400 kV	BIHARSHARIFF-VARANASI	2	0	466	0.0	7.7	-7.7
14	220 kV	SAHUPURI-KARAMNASA	1	15	97	0.0	0.9	-0.9
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	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	**1.0**	**91.8**	**-90.8**
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	747	328	5.4	0.0	5.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	871	605	1.5	0.0	1.5
3	765 kV	JHARSUGUDA-DURG	2	0	996	0.0	19.6	-19.6
4	400 kV	JHARSUGUDA-RAIGARH	4	0	646	0.0	10.4	-10.4
5	400 kV	RANCHI-SIPAT	2	172	214	0.0	1.9	-1.9
6	220 kV	BUDHIPADAR-RAIGARH	1	13	104	0.0	1.1	-1.1
7	220 kV	BUDHIPADAR-KORBA	2	79	104	0.0	0.2	-0.2
					ER-WR	**6.9**	**33.1**	**-26.2**
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	19	0.0	0.0	0.0
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1989	0.0	42.6	-42.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2729	0.0	52.7	-52.7
4	400 kV	TALCHER-I/C	2	611	204	2.5	0.0	2.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	**0.0**	**95.3**	**-95.3**
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	222	126	1.8	0.1	1.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	704	145	7.9	0.0	7.9
3	220 kV	ALIPURDUAR-SALAKATI	2	117	19	1.5	0.0	1.5
					ER-NER	**11.1**	**0.1**	**11.1**
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	681	0	15.0	0.0	15.0
					NER-NR	**15.0**	**0.0**	**15.0**
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	1	0	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	0	197	0.0	4.8	-4.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1452	0.0	34.8	-34.8
4	765 kV	GWALIOR-AGRA	2	0	2961	0.0	45.9	-45.9
5	765 kV	GWALIOR-PHAGI	2	0	2290	0.0	40.6	-40.6
6	765 kV	JABALPUR-ORAI	2	0	1399	0.0	42.5	-42.5
7	765 kV	GWALIOR-ORAI	1	1187	0	19.2	0.0	19.2
8	765 kV	SATNA-ORAI	1	0	1311	0.0	25.0	-25.0
9	765 kV	BANASKANTHA-CHITORGARH	2	892	985	5.1	2.2	2.9
10	765 kV	VINDHYACHAL-VARANASI	2	0	3474	0.0	49.4	-49.4
11	400 kV	ZERDA-KANKROLI	1	105	173	0.7	0.5	0.2
12	400 kV	ZERDA -BHINMAL	1	379	409	1.6	2.0	-0.4
13	400 kV	VINDHYACHAL -RIHAND	1	967	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	28	713	0.0	6.3	-6.3
15	220 kV	BHANPURA-RANPUR	1	0	147	0.0	2.5	-2.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.2	-1.2
17	220 kV	MEHGAON-AURAIYA	1	102	21	0.9	0.0	0.9
18	220 kV	MALANPUR-AURAIYA	1	69	41	0.5	0.1	0.3
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	**50.0**	**257.9**	**-207.8**
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1014	0.0	16.5	-16.5
2	HVDC	RAIGARH-PUGALUR	2	0	5010	0.0	45.4	-45.4
3	765 kV	SOLAPUR-RAICHUR	2	1478	1159	3.7	10.2	-6.5
4	765 kV	WARDHA-NIZAMABAD	2	0	2250	0.0	37.0	-37.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2232	0.0	36.3	-36.3
6	400 kV	KOLHAPUR-KUDGI	2	1561	0	20.6	0.0	20.6
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	2.3	0.0	2.3
					WR-SR	**26.5**	**145.5**	**-118.9**

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)	-255	16	-153	-3.67
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-245	223	-29	-0.70
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-219	-69	-164	-3.94
	NER	132kV GELEPHU-SALAKATI	-32	0	-20	-0.48
	NER	132kV MOTANGA-RANGIA	-14	0	-2	-0.05
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-71	0	-49	-1.17
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-463	-58	-208	-4.99
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-921	-586	-770	-18.47
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-767	-405	-643	-15.43
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-105	0	-91	-2.18

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 05-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	10.20	0.00	0.00	0.00	0.00	0.00	10.20
Nepal	0.23	0.00	4.97	0.00	0.00	0.25	0.00	0.00	5.45
Bangladesh	18.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.49
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.72	0.00	15.17	0.00	0.00	0.25	0.00	0.00	34.14

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58
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	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58

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	0.58	0.00	-10.20	0.00	0.00	0.00	0.00	0.00	-9.62
Nepal	-0.23	0.00	-4.97	0.00	0.00	-0.25	0.00	0.00	-5.45
Bangladesh	-18.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.49
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.14	0.00	-15.17	0.00	0.00	-0.25	0.00	0.00	-33.56