



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
GRID CONTROLLER OF INDIA LIMITED
ग्रीड 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: 04th 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 03.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 03-जनवरी-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रीड 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 03rd January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 04-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)	59160	59901	45134	19121	2578	185894
Peak Shortage (MW)	0	0	0	1268	36	1304
Energy Met (MU)	1214	1421	1143	414	47	4239
Hydro Gen (MU)	99	42	54	16	10	221
Wind Gen (MU)	20	52	57	-	-	129
Solar Gen (MU)*	96.70	50.43	93.58	2.56	1.11	244
Energy Shortage (MU)	6.72	0.00	0.00	8.26	0.47	15.45
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62059	72003	57623	20325	2739	210785
Time Of Maximum Demand Met	12:22	10:23	09:44	17:37	17:44	10:54

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	0.32	1.81	10.00	12.13	78.52	9.35

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	8161	0	154.1	63.7	0.2	396	0.00
	Haryana	8621	0	156.9	96.7	-0.4	151	0.00
	Rajasthan	17088	0	322.4	122.0	-1.2	205	3.65
	Delhi	5250	0	84.9	76.8	-1.0	247	0.00
	UP	19713	0	345.1	119.6	-1.8	1492	2.18
	Uttarakhand	2288	0	42.7	32.6	0.1	160	0.40
	HP	2105	0	36.9	30.4	0.4	231	0.11
	J&K(UT) & Ladakh(UT)	2956	0	63.1	58.4	-0.2	215	0.38
	Chandigarh	288	0	4.7	4.5	0.2	82	0.00
Railways NR ISTS	168	0	3.5	3.2	0.2	37	0.00	
WR	Chhattisgarh	4816	0	98.8	40.1	0.1	513	0.00
	Gujarat	20260	0	384.5	155.3	-0.2	396	0.00
	MP	16652	0	307.3	192.9	-5.6	435	0.00
	Maharashtra	27314	0	557.1	183.6	-3.3	865	0.00
	Goa	701	0	13.9	13.5	-0.1	67	0.00
	DNHDDPDCL	1253	0	28.5	28.6	-0.1	53	0.00
	AMNSIL	816	0	18.5	9.3	-0.2	238	0.00
	BALCO	522	0	12.4	12.5	-0.1	8	0.00
SR	Andhra Pradesh	10992	0	202.5	75.1	-0.6	483	0.00
	Telangana	13035	0	237.8	106.3	-0.2	554	0.00
	Karnataka	15019	0	271.5	112.4	-0.2	884	0.00
	Kerala	4251	0	85.8	68.1	0.7	407	0.00
	Tamil Nadu	16138	0	336.7	208.9	-1.0	528	0.00
	Puducherry	401	0	8.6	8.3	-0.3	31	0.00
ER	Bihar	4621	165	86.8	75.9	-1.0	292	5.49
	DVC	3205	0	70.5	-51.5	-0.8	295	0.00
	Jharkhand	1695	275	30.8	22.4	-1.2	371	2.77
	Odisha	4508	0	87.8	28.4	-1.9	288	0.00
	West Bengal	6676	0	135.8	19.2	-2.2	290	0.00
	Sikkim	119	0	1.9	1.9	0.0	37	0.00
Railways ER ISTS	16	0	0.1	0.1	0.0	12	0.00	
NER	Arunachal Pradesh	160	0	2.9	2.9	-0.1	23	0.00
	Assam	1536	0	26.5	21.1	0.3	94	0.00
	Manipur	228	20	3.2	3.1	0.1	39	0.18
	Meghalaya	331	36	6.3	5.2	-0.2	45	0.29
	Mizoram	136	0	2.1	1.7	-0.2	9	0.00
	Nagaland	145	0	2.4	2.3	0.0	18	0.00
Tripura	229	0	3.8	3.0	-0.3	2	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-8.9	-6.1	-21.2	-15.1
Day Peak (MW)	-728.0	-323.0	-904.0	-769.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	273.4	-280.5	155.6	-150.3	1.9	0.0
Actual(MU)	269.8	-281.8	167.1	-160.7	0.7	-4.8
O/D/U/D(MU)	-3.5	-1.3	11.5	-10.4	-1.1	-4.8

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6454	7931	5438	5961	340	26123	48
State Sector	8541	11037	5615	3254	281	28727	52
Total	14995	18967	11053	9215	621	54850	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	727	1623	682	637	16	3684	79
Lignite	30	11	58	0	0	99	2
Hydro	99	42	54	16	10	221	5
Nuclear	26	52	76	0	0	155	3
Gas, Naptha & Diesel	15	23	7	0	25	71	2
RES (Wind, Solar, Biomass & Others)	140	106	178	4	1	430	9
Total	1037	1858	1055	657	52	4660	100

Share of RES in total generation (%)	13.51	5.73	16.90	0.64	2.12	9.23
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	25.62	10.81	29.22	3.14	20.42	17.30

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.018
Based on State Max Demands	1.055

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	210785	10:54	2199
Non-Solar hr	193675	17:47	1599

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: 04-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	1128	0.0	18.6	-18.6
4	765 kV	SASARAM-FATEHPUR	1	0	615	0.0	10.2	-10.2
5	765 kV	GAYA-BALIA	1	0	798	0.0	13.5	-13.5
6	400 kV	PUSAULI-VARANASI	1	55	29	0.5	0.0	0.5
7	400 kV	PUSAULI-ALLAHABAD	1	0	106	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	827	0.0	11.0	-11.0
9	400 kV	PATNA-BALIA	2	0	493	0.0	9.9	-9.9
10	400 kV	NAUBATPUR-BALIA	2	0	519	0.0	9.3	-9.3
11	400 kV	BIHARSHARIF-BALIA	2	0	401	0.0	5.3	-5.3
12	400 kV	MOTIHARI-GORAKHPUR	2	0	494	0.0	8.3	-8.3
13	400 kV	BIHARSHARIF-VARANASI	2	0	516	0.0	8.5	-8.5
14	220 kV	SAHUPURI-KARAMNANA	1	0	137	0.0	1.7	-1.7
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						1.0	98.9	-97.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	837	309	3.2	0.0	3.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	776	896	0.0	2.8	-2.8
3	765 kV	JHARSUGUDA-DURG	2	0	1183	0.0	22.7	-22.7
4	400 kV	JHARSUGUDA-RAIGARH	4	0	670	0.0	10.9	-10.9
5	400 kV	RANCHI-SIPAT	2	142	345	0.0	2.3	-2.3
6	220 kV	BUDHIPADAR-RAIGARH	1	7	114	0.0	1.2	-1.2
7	220 kV	BUDHIPADAR-KORBA	2	102	123	0.0	0.4	-0.4
ER-WR						3.2	40.4	-37.2
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	1292	0.0	31.3	-31.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	3148	0.0	55.6	-55.6
4	400 kV	TALCHER-I/C	2	629	0	13.6	0.0	13.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	86.9	-86.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	251	0	2.6	0.0	2.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	789	0	10.0	0.0	10.0
3	220 kV	ALIPURDUAR-SALAKATI	2	138	0	1.9	0.0	1.9
ER-NER						14.5	0.0	14.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	663	0	16.2	0.0	16.2
NER-NR						16.2	0.0	16.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	1	1	0.0	0.0	0.0
2	HVDC	VINDHYACHAL B/B	-	180	197	4.2	0.6	3.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1452	0.0	36.3	-36.3
4	765 kV	GWALIOR-AGRA	2	0	3014	0.0	46.2	-46.2
5	765 kV	GWALIOR-PHAGI	2	0	2427	0.0	41.6	-41.6
6	765 kV	JABALPUR-ORAI	2	0	1381	0.0	40.9	-40.9
7	765 kV	GWALIOR-ORAI	1	1143	0	18.4	0.0	18.4
8	765 kV	SATNA-ORAI	1	0	1348	0.0	26.3	-26.3
9	765 kV	BANASKANTHA-CHITORGARH	2	1177	762	10.8	1.4	9.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3297	0.0	48.7	-48.7
11	400 kV	ZERDA-KANKROLI	1	156	141	1.4	0.2	1.2
12	400 kV	ZERDA -BHINMAL	1	469	332	2.8	1.1	1.7
13	400 kV	VINDHYACHAL -RIHAND	1	983	0	22.4	0.0	22.4
14	400 kV	RAPP-SHUALPUR	2	128	697	0.2	5.7	-5.5
15	220 kV	BHANPURA-RANPUR	1	0	145	0.0	2.5	-2.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.3	-1.3
17	220 kV	MEHGAON-AURAIYA	1	99	23	0.8	0.0	0.7
18	220 kV	MALANPUR-AURAIYA	1	74	44	0.3	0.1	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	0.0	0.0	0.0
WR-NR						61.3	253.0	-191.7
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	16.5	-16.5
2	HVDC	RAIGARH-PUGALUR	2	0	4009	0.0	46.5	-46.5
3	765 kV	SOLAPUR-RAICHUR	2	1170	1919	2.4	11.1	-8.7
4	765 kV	WARDHA-NIZAMABAD	2	0	2965	0.0	38.3	-38.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2907	0.0	38.2	-38.2
6	400 kV	KOLHAPUR-KUDGI	2	1380	0	19.0	0.0	19.0
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	119	2.2	0.0	2.2
WR-SR						23.6	150.6	-127.1

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)	-233	-2	-112	-2.69
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	226	-226	-65	-1.56
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-221	-77	-166	-3.98
	NER	132kV GELEPHU-SALAKATI	-33	0	-20	-0.49
	NER	132kV MOTANGA-RANGIA	-20	9	-5	-0.13
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-68	0	-49	-1.17
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-323	0	-204	-4.89
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-799	-599	-795	-19.09
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-769	-408	-628	-15.06
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-105	0	-90	-2.16

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 04-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	10.22	0.00	0.00	0.08	0.00	0.00	10.30
Nepal	0.22	0.00	3.59	0.00	0.00	1.16	0.00	0.00	4.97
Bangladesh	18.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.98
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.20	0.00	13.81	0.00	0.00	1.24	0.00	0.00	34.25

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
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	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57

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	0.57	0.00	-10.22	0.00	0.00	-0.08	0.00	0.00	-9.73
Nepal	-0.22	0.00	-3.59	0.00	0.00	-1.16	0.00	0.00	-4.97
Bangladesh	-18.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.98
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.63	0.00	-13.81	0.00	0.00	-1.24	0.00	0.00	-33.68