

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 06th 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 05.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 05-जनवरी-2024 की अखिल भारतीय प्रणाली की दैनिक ग्रिड 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 05th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 06-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)	58299	58139	44810	20120	2580	183948
Peak Shortage (MW)	312	63	0	905	44	1324
Energy Met (MU)	1240	1427	1122	428	47	4263
Hydro Gen (MU)	102	37	53	18	10	219
Wind Gen (MU)	14	65	45	-	-	124
Solar Gen (MU)*	95.52	48.68	86.71	4.76	1.16	237
Energy Shortage (MU)	16.04	0.31	0.00	5.28	0.50	22.13
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62979	72523	56332	21033	2685	210777
Time Of Maximum Demand Met	11:44	10:23	09:52	18:00	17:39	10:39

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	0.00	0.67	9.29	9.96	74.67	15.37

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	8141	0	156.0	62.0	0.8	302	0.00
	Haryana	8852	75	163.3	101.0	0.0	209	2.22
	Rajasthan	16795	0	317.2	125.9	-0.8	233	4.25
	Delhi	5413	0	90.4	77.9	-0.5	342	0.00
	UP	19060	0	356.3	132.4	-0.8	1010	7.33
	Uttarakhand	2385	0	45.3	34.2	1.2	248	1.07
	HP	2178	0	38.9	31.6	0.3	258	0.00
	J&K(UT) & Ladakh(UT)	2975	0	63.7	58.1	0.6	329	1.17
	Chandigarh	300	0	5.0	4.5	0.5	100	0.00
Railways NR ISTS	170	0	3.5	3.2	0.3	53	0.00	
WR	Chhattisgarh	5134	0	103.4	47.3	0.6	364	0.31
	Gujarat	21235	0	399.7	145.7	-1.6	533	0.00
	MP	16108	0	291.5	181.7	-4.9	399	0.00
	Maharashtra	27013	0	557.2	182.9	-6.7	917	0.00
	Goa	715	0	14.5	13.7	0.3	202	0.00
	DNHDDPDCL	1260	0	29.2	29.0	0.2	53	0.00
	AMNSIL	854	0	18.6	9.1	0.1	245	0.00
	BALCO	519	0	12.4	12.5	-0.1	2	0.00
SR	Andhra Pradesh	11074	0	202.1	73.4	-2.1	413	0.00
	Telangana	13460	0	242.3	111.7	-0.8	554	0.00
	Karnataka	14479	0	261.7	106.1	0.2	786	0.00
	Kerala	4135	0	81.0	63.7	0.5	265	0.00
	Tamil Nadu	15532	0	326.0	200.0	-0.1	802	0.00
	Puducherry	406	0	8.8	8.4	-0.4	15	0.00
ER	Bihar	4851	587	93.1	81.5	0.0	363	2.90
	DVC	3359	0	71.5	-52.9	-0.7	399	0.00
	Jharkhand	1656	0	30.8	22.3	-1.1	235	2.38
	Odisha	4513	0	88.1	18.2	-1.2	318	0.00
	West Bengal	6783	0	142.3	22.4	-2.4	134	0.00
	Sikkim	116	0	2.0	2.0	0.0	17	0.00
Railways ER ISTS	11	0	0.1	0.1	0.0	0	0.00	
NER	Arunachal Pradesh	150	0	2.6	2.8	-0.3	31	0.00
	Assam	1498	0	26.0	21.3	-0.4	96	0.00
	Manipur	219	27	3.0	3.1	-0.1	32	0.25
	Meghalaya	338	25	6.4	5.0	-0.2	258	0.25
	Mizoram	134	0	2.1	1.9	-0.3	11	0.00
	Nagaland	157	0	2.3	2.3	-0.1	31	0.00
Tripura	260	0	4.1	3.2	-0.2	88	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-9.0	-6.3	-16.7	-15.4
Day Peak (MW)	-693.6	-463.0	-942.0	-769.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	298.7	-304.3	154.1	-150.9	2.3	0.0
Actual(MU)	297.3	-299.1	159.2	-161.5	0.9	-3.3
O/D/U/D(MU)	-1.4	5.1	5.0	-10.6	-1.5	-3.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7464	8814	5598	5581	340	27796	50
State Sector	9576	11147	4930	2239	281	28172	50
Total	17040	19960	10528	7820	621	55968	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	727	1637	687	642	15	3709	80
Lignite	33	11	58	0	0	102	2
Hydro	102	37	53	18	10	219	5
Nuclear	10	37	76	0	0	123	3
Gas, Naptha & Diesel	23	28	7	0	25	83	2
RES (Wind, Solar, Biomass & Others)	133	116	160	7	1	417	9
Total	1027	1865	1041	667	51	4652	100

Share of RES in total generation (%)	12.91	6.20	15.38	1.07	2.26	8.96
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.79	10.15	27.82	3.70	21.23	16.32

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.022
Based on State Max Demands	1.054

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	210777	10:39	3174
Non-Solar hr	191194	17:54	2006

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: 06-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	976	0.0	16.1	-16.1
4	765 kV	SASARAM-FATEHPUR	1	0	431	0.0	7.6	-7.6
5	765 kV	GAYA-BALIA	1	0	881	0.0	15.6	-15.6
6	400 kV	PUSAULI-VARANASI	1	58	13	0.5	0.0	0.5
7	400 kV	PUSAULI-ALLAHABAD	1	0	92	0.0	1.6	-1.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	663	0.0	9.4	-9.4
9	400 kV	PATNA-BALIA	2	0	609	0.0	12.1	-12.1
10	400 kV	NAUBATPUR-BALIA	2	0	649	0.0	12.8	-12.8
11	400 kV	BIHARSHARIFF-BALIA	2	0	393	0.0	6.8	-6.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	461	0.0	7.9	-7.9
13	400 kV	BIHARSHARIFF-VARANASI	2	0	433	0.0	7.6	-7.6
14	220 kV	SAHUPURI-KARAMNANA	1	5	100	0.0	1.1	-1.1
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.1	0.0	0.1
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						1.1	99.8	-98.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	384	679	0.0	0.3	-0.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	851	626	1.9	0.0	1.9
3	765 kV	JHARSUGUDA-DURG	2	0	1086	0.0	19.1	-19.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	718	0.0	11.9	-11.9
5	400 kV	RANCHI-SIPAT	2	174	246	0.0	1.0	-1.0
6	220 kV	BUDHIPADAR-RAIGARH	1	37	129	0.0	1.0	-1.0
7	220 kV	BUDHIPADAR-KORBA	2	85	128	0.0	0.2	-0.2
ER-WR						1.9	33.5	-31.5
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	1641	0.0	36.1	-36.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2748	0.0	50.3	-50.3
4	400 kV	TALCHER-I/C	2	608	0	8.7	0.0	8.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	86.4	-86.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	203	124	1.3	0.2	1.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	597	70	6.2	0.0	6.2
3	220 kV	ALIPURDUAR-SALAKATI	2	111	12	1.3	0.0	1.3
ER-NER						8.7	0.2	8.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	648	0	10.3	0.0	10.3
NER-NR						10.3	0.0	10.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	1	786	0.0	0.5	-0.5
2	HVDC	VINDHYACHAL B/B	-	0	197	0.0	4.9	-4.9
3	HVDC	MUNDRA-MOHINDERGARH	2	0	2364	0.0	47.7	-47.7
4	765 kV	GWALIOR-AGRA	2	0	2674	0.0	42.4	-42.4
5	765 kV	GWALIOR-PHAGI	2	0	2238	0.0	39.2	-39.2
6	765 kV	JABALPUR-ORAI	2	0	1319	0.0	41.7	-41.7
7	765 kV	GWALIOR-ORAI	1	1093	0	19.0	0.0	19.0
8	765 kV	SATNA-ORAI	1	0	1287	0.0	24.0	-24.0
9	765 kV	BANASKANTHA-CHITORGARH	2	928	779	8.8	1.1	7.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	3196	0.0	52.3	-52.3
11	400 kV	ZERDA-KANKROLI	1	137	150	0.9	0.4	0.5
12	400 kV	ZERDA -BHINMAL	1	410	327	2.3	1.1	1.1
13	400 kV	VINDHYACHAL -RIHAND	1	981	0	23.2	0.0	23.2
14	400 kV	RAPP-SHUJALPUR	2	0	783	0.0	7.8	-7.8
15	220 kV	BHANPURA-RANPUR	1	0	149	0.0	2.5	-2.5
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.5	-1.5
17	220 kV	MEHGAON-AURAIYA	1	118	14	0.9	0.0	0.9
18	220 kV	MALANPUR-AURAIYA	1	77	37	0.2	0.1	0.1
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						55.2	267.3	-212.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1016	0.0	14.9	-14.9
2	HVDC	RAIGARH-PUGALUR	2	0	4013	0.0	62.4	-62.4
3	765 kV	SOLAPUR-RAICHUR	2	1879	1233	7.4	6.8	0.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2468	0.0	34.2	-34.2
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	31.7	-31.7
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	124	2.3	0.0	2.3
WR-SR						31.7	149.9	-118.2

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)	-254	-33	-147	-3.52
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-235	231	-42	-1.00
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-222	-77	-167	-4.02
	NER	132kV GELEPHU-SALAKATI	-32	-5	-18	-0.43
	NER	132kV MOTANGA-RANGIA	-14	0	-3	-0.07
NEPAL	NR	NEPAL IMPORT (FROM UP)	-69	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-69	0	-50	-1.20
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-463	-58	-214	-5.13
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-823	-343	-617	-14.80
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-769	-407	-640	-15.37
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-119	0	-78	-1.86

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 06-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	0.00	0.00	0.00	10.22
Nepal	0.23	0.00	5.12	0.00	0.00	0.28	0.00	0.00	5.63
Bangladesh	14.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.72
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	14.95	0.00	15.34	0.00	0.00	0.28	0.00	0.00	30.57

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
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	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67

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	0.67	0.00	-10.22	0.00	0.00	0.00	0.00	0.00	-9.55
Nepal	-0.23	0.00	-5.12	0.00	0.00	-0.28	0.00	0.00	-5.63
Bangladesh	-14.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-14.72
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-14.28	0.00	-15.34	0.00	0.00	-0.28	0.00	0.00	-29.90