



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: 07th 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 06.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 06-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 06th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 07-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)	59783	58352	44211	20363	2587	185296
Peak Shortage (MW)	0	0	0	496	35	531
Energy Met (MU)	1249	1410	1111	420	47	4237
Hydro Gen (MU)	100	30	45	16	11	201
Wind Gen (MU)	17	111	57	-	-	186
Solar Gen (MU)*	95.46	51.73	94.73	5.12	1.10	248
Energy Shortage (MU)	3.47	0.00	0.00	1.95	0.45	5.87
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	63598	71282	56505	20879	2732	211224
Time Of Maximum Demand Met	12:18	10:12	09:44	18:48	17:31	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	0.060	0.05	2.88	6.11	9.04	69.26	21.70

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	8451	0	162.8	71.6	0.8	357	0.00
	Haryana	8163	0	160.6	101.1	-0.6	244	0.00
	Rajasthan	17027	37	325.2	123.8	-3.1	299	2.22
	Delhi	5100	0	85.5	72.9	-1.5	370	0.00
	UP	19601	0	356.9	143.8	-2.8	729	0.00
	Uttarakhand	2443	0	45.9	35.4	0.4	192	0.29
	HP	2127	0	38.0	32.0	0.3	155	0.00
	J&K(UT) & Ladakh(UT)	3079	0	65.7	60.7	0.0	185	0.96
	Chandigarh	284	0	4.7	4.4	0.3	82	0.00
Railways NR ISTS	164	0	3.3	3.3	0.0	28	0.00	
WR	Chhattisgarh	5076	0	102.5	53.4	-1.4	377	0.00
	Gujarat	20951	0	401.5	122.7	-0.2	735	0.00
	MP	14980	0	272.4	161.5	-4.8	346	0.00
	Maharashtra	27237	0	560.0	181.2	1.8	630	0.00
	Goa	711	0	14.3	13.9	-0.1	47	0.00
	DNHDDPDCL	1269	0	29.2	29.2	0.0	44	0.00
	AMNSIL	777	0	17.6	8.3	0.3	229	0.00
	BALCO	524	0	12.5	12.5	0.0	15	0.00
SR	Andhra Pradesh	11087	0	203.3	65.5	-2.0	363	0.00
	Telangana	13190	0	239.5	115.0	-1.4	693	0.00
	Karnataka	14291	0	257.4	107.5	-2.2	563	0.00
	Kerala	4062	0	81.8	65.3	0.9	310	0.00
	Tamil Nadu	15572	0	320.1	190.4	-0.7	628	0.00
	Puducherry	381	0	8.5	8.2	-0.4	18	0.00
ER	Bihar	4724	336	88.5	77.4	0.0	438	0.91
	DVC	3359	0	70.9	-51.8	-0.1	269	0.00
	Jharkhand	1589	0	30.9	23.1	-1.9	170	1.04
	Odisha	4474	0	86.6	19.4	-1.7	283	0.00
	West Bengal	6786	0	141.4	21.7	-2.3	261	0.00
	Sikkim	118	0	1.9	2.0	-0.1	13	0.00
Railways ER ISTS	14	0	0.1	0.2	0.0	3	0.00	
NER	Arunachal Pradesh	165	0	2.8	2.8	-0.1	49	0.00
	Assam	1521	0	26.3	21.9	0.6	200	0.00
	Manipur	225	33	3.2	3.1	0.1	50	0.18
	Meghalaya	341	35	6.3	4.8	-0.1	78	0.27
	Mizoram	148	0	2.2	1.9	-0.2	23	0.00
	Nagaland	155	0	2.4	2.3	0.1	31	0.00
Tripura	235	0	3.9	3.0	-0.3	6	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-9.8	-6.3	-18.9	-15.6
Day Peak (MW)	-684.0	-341.0	-1023.0	-769.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	326.7	-335.2	143.3	-136.4	1.7	0.0
Actual(MU)	323.8	-333.7	147.0	-146.7	1.6	-8.0
O/D/U/D(MU)	-2.9	1.6	3.8	-10.3	-0.2	-8.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7464	8814	4938	6201	290	27706	50
State Sector	9851	9979	4740	2879	281	27729	50
Total	17315	18793	9678	9080	571	55436	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	716	1604	675	618	15	3629	79
Lignite	30	11	57	0	0	98	2
Hydro	100	30	45	16	11	201	4
Nuclear	5	37	76	0	0	119	3
Gas, Naptha & Diesel	19	24	7	0	24	74	2
RES (Wind, Solar, Biomass & Others)	137	165	180	8	1	491	11
Total	1007	1871	1040	642	51	4611	100

Share of RES in total generation (%)	13.56	8.83	17.35	1.18	2.14	10.65
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.00	12.42	28.99	3.66	23.02	17.59

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.043

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	211224	10:25	504
Non-Solar hr	192566	18:29	1664

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: 07-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	48	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	1041	0.0	15.5	-15.5
4	765 kV	SASARAM-FATEHPUR	1	0	495	0.0	8.1	-8.1
5	765 kV	GAYA-BALIA	1	0	784	0.0	13.9	-13.9
6	400 kV	PUSAULI-VARANASI	1	27	33	0.0	0.0	0.0
7	400 kV	PUSAULI-ALLAHABAD	1	0	77	0.0	1.2	-1.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	712	0.0	9.4	-9.4
9	400 kV	PATNA-BALIA	2	0	616	0.0	11.6	-11.6
10	400 kV	NAUBATPUR-BALIA	2	0	654	0.0	11.8	-11.8
11	400 kV	BIHARSHARIFF-BALIA	2	0	389	0.0	5.7	-5.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	453	0.0	7.9	-7.9
13	400 kV	BIHARSHARIFF-VARANASI	2	0	448	0.0	7.2	-7.2
14	220 kV	SAHUPURI-KARAMNUSA	1	1	100	0.0	0.9	-0.9
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-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.5	94.4	-93.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	601	929	3.0	0.0	3.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	833	726	0.0	1.9	-1.9
3	765 kV	JHARSUGUDA-DURG	2	0	992	0.0	17.4	-17.4
4	400 kV	JHARSUGUDA-RAIGARH	4	0	637	0.0	10.0	-10.0
5	400 kV	RANCHI-SIPAT	2	214	260	0.0	1.7	-1.7
6	220 kV	BUDHIPADAR-RAIGARH	1	2	136	0.0	1.6	-1.6
7	220 kV	BUDHIPADAR-KORBA	2	96	114	0.0	0.3	-0.3
ER-WR						3.0	32.8	-29.8
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	1992	0.0	38.0	-38.0
3	765 kV	ANGUL-SRIKAKULAM	2	0	2514	0.0	44.5	-44.5
4	400 kV	TALCHER-I/C	2	606	220	6.5	0.0	6.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	82.4	-82.4
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	234	69	2.1	0.0	2.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	746	13	9.2	0.0	9.2
3	220 kV	ALIPURDUAR-SALAKATI	2	122	0	1.7	0.0	1.7
ER-NER						12.9	0.0	12.9
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	660	0	15.2	0.0	15.2
NER-NR						15.2	0.0	15.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	3012	0.0	51.8	-51.8
2	HVDC	VINDHYACHAL B/B	-	0	197	0.0	4.8	-4.8
3	HVDC	MUNDRA-MOHINDERGARH	2	0	2365	0.0	52.0	-52.0
4	765 kV	GWALIOR-AGRA	2	0	2884	0.0	41.2	-41.2
5	765 kV	GWALIOR-PHAGI	2	0	2129	0.0	28.6	-28.6
6	765 kV	JABALPUR-ORAI	2	0	1207	0.0	35.8	-35.8
7	765 kV	GWALIOR-ORAI	1	1069	0	16.0	0.0	16.0
8	765 kV	SATNA-ORAI	1	0	1151	0.0	22.5	-22.5
9	765 kV	BANASKANTHA-CHITORGARH	2	768	1161	5.8	4.5	1.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	3233	0.0	44.9	-44.9
11	400 kV	ZERDA-KANKROLI	1	100	176	0.6	0.8	-0.2
12	400 kV	ZERDA-BHINMAL	1	379	355	2.3	2.1	0.2
13	400 kV	VINDHYACHAL-RIHAND	1	984	0	22.2	0.0	22.2
14	400 kV	RAPP-SHUJALPUR	2	22	788	0.0	7.3	-7.3
15	220 kV	BHANPURA-RANPUR	1	0	136	0.0	2.3	-2.3
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.2	-1.2
17	220 kV	MEHGAON-AURAIYA	1	101	23	0.8	0.0	0.8
18	220 kV	MALANPUR-AURAIYA	1	67	40	0.4	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						48.2	300.0	-251.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	12.8	-12.8
2	HVDC	RAIGARH-PUGALUR	2	0	5014	0.0	52.0	-52.0
3	765 kV	SOLAPUR-RAICHUR	2	1786	1579	5.9	9.6	-3.7
4	765 kV	WARDHA-NIZAMABAD	2	0	2626	0.0	30.3	-30.3
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2509	0.0	35.1	-35.1
6	400 kV	KOLHAPUR-KUDGI	2	1569	0	20.3	0.0	20.3
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						28.4	139.8	-111.4

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)	-234	-21	-132	-3.16
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-246	223	-66	-1.58
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-234	-92	-179	-4.29
	NER	132kV GELEPHU-SALAKATI	-38	0	-28	-0.66
	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	-47	-1.13
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-341	-12	-217	-5.20
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-919	-448	-699	-16.77
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-769	-403	-650	-15.59
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-104	0	-87	-2.08

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 07-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	10.29	0.00	0.00	0.42	0.00	0.00	10.71
Nepal	0.23	0.00	5.20	0.00	0.00	0.00	0.00	0.00	5.43
Bangladesh	16.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.72
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	16.95	0.00	15.49	0.00	0.00	0.42	0.00	0.00	32.86

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
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	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52

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	0.52	0.00	-10.29	0.00	0.00	-0.42	0.00	0.00	-10.19
Nepal	-0.23	0.00	-5.20	0.00	0.00	0.00	0.00	0.00	-5.43
Bangladesh	-16.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16.72
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-16.43	0.00	-15.49	0.00	0.00	-0.42	0.00	0.00	-32.34