

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: 11th 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 10.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 10-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 10th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 11-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)	61503	60259	44590	20635	2666	189653
Peak Shortage (MW)	585	0	0	797	24	1406
Energy Met (MU)	1274	1428	1086	434	49	4271
Hydro Gen (MU)	93	26	39	20	11	190
Wind Gen (MU)	16	120	84	-	-	220
Solar Gen (MU)*	102.53	46.47	81.89	2.38	0.99	234
Energy Shortage (MU)	4.61	0.00	0.00	6.23	0.43	11.27
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65371	71431	54608	21611	2762	212121
Time Of Maximum Demand Met	11:10	10:41	09:36	18:22	17:40	10:43

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	0.030	0.00	0.22	2.45	2.67	75.73	21.59

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	8467	0	162.3	63.1	0.8	320	0.00
	Haryana	9315	0	165.4	99.3	0.4	139	2.91
	Rajasthan	17718	0	327.3	114.7	-0.8	463	0.00
	Delhi	5526	0	92.9	79.9	-0.3	323	0.00
	UP	20806	0	365.7	122.9	-0.5	1100	0.00
	Uttarakhand	2473	0	47.1	36.6	0.4	212	0.42
	HP	2153	0	38.2	33.0	-0.1	256	0.00
	J&K(UT) & Ladakh(UT)	3016	0	65.9	60.9	0.1	231	1.28
	Chandigarh	323	0	5.6	5.2	0.4	83	0.00
Railways NR ISTS	184	0	3.7	3.4	0.4	50	0.00	
WR	Chhattisgarh	5242	0	106.5	44.9	-0.8	270	0.00
	Gujarat	20686	0	406.2	127.7	-0.2	464	0.00
	MP	15376	0	280.3	173.4	-4.9	376	0.00
	Maharashtra	27341	0	560.0	184.9	1.6	750	0.00
	Goa	718	0	14.7	13.8	0.3	47	0.00
	DNHDDPDCL	1245	0	29.3	29.3	0.0	47	0.00
	AMNSIL	1083	0	18.5	6.6	0.3	248	0.00
BALCO	524	0	12.5	12.5	0.0	13	0.00	
SR	Andhra Pradesh	11004	0	204.5	63.1	-1.1	362	0.00
	Telangana	13446	0	245.5	136.5	0.9	825	0.00
	Karnataka	13950	0	252.6	110.7	-0.6	637	0.00
	Kerala	4112	0	79.5	65.9	0.3	248	0.00
	Tamil Nadu	14733	0	295.5	172.7	-6.1	641	0.00
	Puducherry	398	0	8.5	8.1	-0.3	30	0.00
ER	Bihar	4837	404	92.1	80.7	-0.3	489	2.56
	DVC	3258	0	71.2	-51.6	-0.2	201	0.00
	Jharkhand	1489	106	31.1	25.5	-0.2	254	3.67
	Odisha	4573	0	94.9	25.3	0.5	419	0.00
	West Bengal	7085	0	142.2	33.6	-2.3	182	0.00
	Sikkim	127	0	2.0	2.1	0.0	13	0.00
Railways ER ISTS	13	0	0.1	0.1	-0.1	5	0.00	
NER	Arunachal Pradesh	174	0	2.9	2.7	0.1	35	0.00
	Assam	1553	0	28.1	22.6	0.7	122	0.00
	Manipur	211	8	3.1	3.1	0.1	30	0.19
	Meghalaya	343	38	6.6	5.3	-0.4	50	0.24
	Mizoram	146	0	2.2	1.9	-0.3	32	0.00
	Nagaland	137	0	2.3	2.3	-0.1	17	0.00
Tripura	229	0	4.0	3.4	-0.3	15	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-10.4	-7.9	-20.8	-16.0
Day Peak (MW)	-705.6	-428.0	-1041.0	-782.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	295.9	-343.1	155.5	-112.0	3.7	0.0
Actual(MU)	290.2	-342.8	154.8	-113.0	3.2	-7.7
O/D/U/D(MU)	-5.7	0.3	-0.7	-1.1	-0.5	-7.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6720	7249	4848	5471	336	24623	51
State Sector	7076	8545	5285	2832	281	24019	49
Total	13796	15793	10133	8303	617	48642	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	761	1622	634	607	15	3639	78
Lignite	33	17	57	0	0	107	2
Hydro	93	26	39	20	11	190	4
Nuclear	22	37	74	0	0	132	3
Gas, Naptha & Diesel	18	23	5	0	25	70	2
RES (Wind, Solar, Biomass & Others)	142	170	195	4	1	512	11
Total	1069	1895	1003	631	52	4644	100

Share of RES in total generation (%)	13.28	8.97	19.43	0.61	1.89	11.02
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.02	12.28	30.71	3.79	23.45	17.82

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.017
Based on State Max Demands	1.056

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	212121	10:43	861
Non-Solar hr	196817	18:26	1471

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: 11-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	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	204	749	0.0	8.2	-8.2
4	765 kV	SASARAM-FATEHPUR	1	0	460	0.0	6.5	-6.5
5	765 kV	GAYA-BALIA	1	0	582	0.0	11.9	-11.9
6	400 kV	PUSAULI-VARANASI	1	36	46	0.0	0.1	-0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	83	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	678	0.0	6.6	-6.6
9	400 kV	PATNA-BALIA	2	0	604	0.0	9.7	-9.7
10	400 kV	NAUBATPUR-BALIA	2	0	638	0.0	10.1	-10.1
11	400 kV	BIHARSHARIFF-BALIA	2	0	371	0.0	4.7	-4.7
12	400 kV	MOTIHARI-GORAKHPUR	2	0	501	0.0	7.1	-7.1
13	400 kV	BIHARSHARIFF-VARANASI	2	3	388	0.0	4.9	-4.9
14	220 kV	SAHUPURI-KARAMNANA	1	0	126	0.0	1.4	-1.4
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						0.5	73.7	-73.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	500	475	1.7	0.0	1.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	792	591	6.5	0.0	6.5
3	765 kV	JHARSUGUDA-DURG	2	0	689	0.0	10.6	-10.6
4	400 kV	JHARSUGUDA-RAIGARH	4	0	583	0.0	8.6	-8.6
5	400 kV	RANCHI-SIPAT	2	186	290	0.0	0.3	-0.3
6	220 kV	BUDHIPADAR-RAIGARH	1	21	106	0.0	0.8	-0.8
7	220 kV	BUDHIPADAR-KORBA	2	154	69	1.3	0.0	1.3
ER-WR						9.6	20.4	-10.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	327	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1301	0.0	31.3	-31.3
3	765 kV	ANGUL-SRIKAKULAM	2	0	2665	0.0	46.0	-46.0
4	400 kV	TALCHER-I/C	2	623	281	10.2	0.0	10.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	84.6	-84.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	233	75	2.2	0.1	2.1
2	400 kV	ALIPURDUAR-BONGAIGAON	2	741	0	8.7	0.0	8.7
3	220 kV	ALIPURDUAR-SALAKATI	2	119	15	1.5	0.0	1.5
ER-NER						12.3	0.1	12.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	661	0	16.3	0.0	16.3
NER-NR						16.3	0.0	16.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	2523	0.0	60.7	-60.7
2	HVDC	VINDHYACHAL B/B	-	267	0	2.9	0.0	2.9
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1546	0.0	27.0	-27.0
4	765 kV	GWALIOR-AGRA	2	0	3097	0.0	44.6	-44.6
5	765 kV	GWALIOR-PHAGI	2	0	1253	0.0	17.2	-17.2
6	765 kV	JABALPUR-ORAI	2	0	1277	0.0	34.0	-34.0
7	765 kV	GWALIOR-ORAI	1	849	0	13.3	0.0	13.3
8	765 kV	SATNA-ORAI	1	0	1250	0.0	22.2	-22.2
9	765 kV	BANASKANTHA-CHITORGARH	2	566	1358	1.5	10.5	-9.0
10	765 kV	VINDHYACHAL-VARANASI	2	0	3407	0.0	54.5	-54.5
11	400 kV	ZERDA-KANKROLI	1	61	217	0.1	1.3	-1.2
12	400 kV	ZERDA -BHINMAL	1	433	472	2.0	3.3	-1.3
13	400 kV	VINDHYACHAL -RIHAND	1	973	0	21.7	0.0	21.7
14	400 kV	RAPP-SHUALPUR	2	250	622	1.3	3.2	-1.9
15	220 kV	BHANPURA-RANPUR	1	0	143	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.1	-1.1
17	220 kV	MEHGAON-AURAIYA	1	88	25	0.5	0.1	0.4
18	220 kV	MALANPUR-AURAIYA	1	65	45	0.2	0.3	-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						43.4	282.4	-238.9
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	16.9	-16.9
2	HVDC	RAIGARH-PUGALUR	2	0	3004	0.0	28.1	-28.1
3	765 kV	SOLAPUR-RAICHUR	2	943	1590	2.3	9.9	-7.6
4	765 kV	WARDHA-NIZAMABAD	2	0	2884	0.0	43.4	-43.4
5	765 kV	WARORA-WARANGAL(NEW)	2	0	0	0.0	40.0	-40.0
6	400 kV	KOLHAPUR-KUDGI	2	1444	0	19.8	0.0	19.8
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	118	2.2	0.0	2.2
WR-SR						24.2	138.3	-114.0

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	-8	-158	-3.80
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-230	189	-79	-1.89
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-226	-87	-173	-4.14
	NER	132kV GELEPHU-SALAKATI	-32	0	-18	-0.43
	NER	132kV MOTANGA-RANGIA	-21	19	-4	-0.10
NEPAL	NR	NEPAL IMPORT (FROM UP)	-73	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-73	0	-59	-1.41
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-428	-42	-271	-6.50
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-921	-577	-771	-18.51
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-782	-417	-668	-16.03
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-120	0	-97	-2.32

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 11-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	10.82	0.00	0.00	0.00	0.00	0.00	0.00	10.82
Nepal	0.28	0.00	5.66	0.00	0.00	0.00	1.13	0.00	0.00	7.07
Bangladesh	18.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.56
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.84	0.00	16.48	0.00	0.00	0.00	1.13	0.00	0.00	36.45

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL	
		BILATERAL TOTAL	COLLECTIVE							
			IDAM			RTM				
			IEX	PXIL	HPX	IEX	PXIL	HPX		
Bhutan	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
Nepal	0.00	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	0.00
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Import	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51

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	0.51	0.00	-10.82	0.00	0.00	0.00	0.00	0.00	0.00	-10.31
Nepal	-0.28	0.00	-5.66	0.00	0.00	0.00	-1.13	0.00	0.00	-7.07
Bangladesh	-18.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.56
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.33	0.00	-16.48	0.00	0.00	0.00	-1.13	0.00	0.00	-35.94