



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: 16th 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 15.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-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 15th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 16-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)	60960	58345	38603	20831	2438	181177
Peak Shortage (MW)	195	0	0	844	44	1083
Energy Met (MU)	1267	1408	1029	450	44	4198
Hydro Gen (MU)	95	35	41	21	11	202
Wind Gen (MU)	4	37	30	-	-	71
Solar Gen (MU)*	115.89	65.11	113.28	5.12	1.10	301
Energy Shortage (MU)	4.26	0.00	0.00	3.34	0.38	7.98
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	65117	72026	54170	21887	2509	212774
Time Of Maximum Demand Met	11:09	10:21	09:27	18:12	17:41	10:28

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	0.034	0.00	0.00	4.11	4.11	78.80	17.09

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	8353	0	158.9	62.4	-0.6	288	0.00
	Haryana	9103	0	159.9	94.6	-0.8	82	1.71
	Rajasthan	17273	0	322.6	117.0	-1.1	151	0.46
	Delhi	5454	0	90.1	75.5	0.3	275	0.00
	UP	20668	0	379.3	124.9	0.5	821	0.00
	Uttarakhand	2287	70	44.9	35.0	0.0	248	0.68
	HP	2030	0	36.3	31.4	0.2	104	0.32
	J&K(UT) & Ladakh(UT)	3052	170	65.9	59.9	1.8	427	1.09
	Chandigarh	334	0	5.4	5.1	0.4	97	0.00
Railways NR ISTS	177	0	3.5	3.2	0.3	53	0.00	
WR	Chhattisgarh	5175	0	106.4	44.1	-0.8	202	0.00
	Gujarat	18638	0	361.8	165.5	0.2	953	0.00
	MP	16720	0	302.2	182.1	-4.4	604	0.00
	Maharashtra	27196	0	564.8	181.4	0.6	659	0.00
	Goa	669	0	13.1	13.3	-0.6	56	0.00
	DNHDDPDCL	1227	0	27.6	27.4	0.2	112	0.00
	AMNSIL	913	0	20.1	9.9	0.2	255	0.00
	BALCO	519	0	12.4	12.5	-0.1	9	0.00
SR	Andhra Pradesh	10988	0	194.5	69.4	-2.0	459	0.00
	Telangana	13057	0	236.6	108.4	0.6	674	0.00
	Karnataka	14846	0	263.4	118.5	-2.3	912	0.00
	Kerala	4173	0	81.8	63.9	1.1	485	0.00
	Tamil Nadu	12413	0	245.7	135.8	-1.1	400	0.00
	Puducherry	310	0	7.0	6.9	-0.5	9	0.00
ER	Bihar	5525	349	102.9	95.9	1.0	329	1.13
	DVC	3351	0	71.6	-46.5	0.2	388	0.00
	Jharkhand	1698	41	31.2	22.8	-1.6	225	2.22
	Odisha	4962	0	101.9	20.8	-1.2	512	0.00
	West Bengal	6731	0	140.1	24.7	-3.8	228	0.00
	Sikkim	114	0	1.8	2.0	-0.2	4	0.00
Railways ER ISTS	12	0	0.1	0.1	0.0	3	0.00	
NER	Arunachal Pradesh	168	0	2.4	2.7	-0.5	48	0.00
	Assam	1313	0	24.0	19.3	-0.3	92	0.00
	Manipur	203	12	3.0	2.9	0.1	39	0.14
	Meghalaya	373	0	6.2	5.1	-0.2	249	0.24
	Mizoram	152	0	2.2	1.6	-0.2	22	0.00
	Nagaland	155	0	2.2	2.2	-0.1	26	0.00
Tripura	237	0	4.0	3.3	-0.1	33	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-12.1	-8.8	-21.4	-17.4
Day Peak (MW)	-1086.8	-366.0	-1046.0	-904.8

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	295.9	-248.8	84.3	-134.5	3.0	0.0
Actual(MU)	292.1	-247.0	84.6	-137.0	1.8	-5.5
O/D/U/D(MU)	-3.8	1.7	0.4	-2.6	-1.3	-5.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	8467	9594	4218	4766	417	27462	51
State Sector	7101	9882	5415	3935	281	26614	49
Total	15568	19476	9633	8701	698	54075	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	747	1575	673	650	11	3655	80
Lignite	29	21	58	0	0	108	2
Hydro	95	35	41	21	11	202	4
Nuclear	26	25	73	0	0	124	3
Gas, Naptha & Diesel	20	18	6	0	26	71	2
RES (Wind, Solar, Biomass & Others)	143	106	169	7	1	426	9
Total	1061	1779	1020	678	48	4586	100

Share of RES in total generation (%)	13.51	5.93	16.56	1.07	2.27	9.29
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	24.93	9.28	27.75	4.13	24.28	16.41

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.013
Based on State Max Demands	1.036

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	212774	10:28	687
Non-Solar hr	187915	17:00	377

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: 16-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	0	828	0.0	12.4	-12.4
4	765 kV	SASARAM-FATEHPUR	1	0	448	0.0	6.9	-6.9
5	765 kV	GAYA-BALIA	1	0	891	0.0	15.5	-15.5
6	400 kV	PUSAULI-VARANASI	1	25	41	0.0	0.2	-0.2
7	400 kV	PUSAULI-ALLAHABAD	1	0	75	0.0	1.0	-1.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	802	0.0	8.9	-8.9
9	400 kV	PATNA-BALIA	2	0	686	0.0	12.1	-12.1
10	400 kV	NAUBATPUR-BALIA	2	0	735	0.0	12.6	-12.6
11	400 kV	BIHARSHARIF-BALIA	2	0	424	0.0	5.9	-5.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	600	0.0	8.9	-8.9
13	400 kV	BIHARSHARIF-VARANASI	2	0	347	0.0	3.3	-3.3
14	220 kV	SAHUPURI-KARAMNANA	1	0	143	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						0.5	90.5	-90.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	326	1051	0.0	9.9	-9.9
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	998	234	7.6	0.0	7.6
3	765 kV	JHARSUGUDA-DURG	2	0	615	0.0	12.3	-12.3
4	400 kV	JHARSUGUDA-RAIGARH	4	0	554	0.0	7.8	-7.8
5	400 kV	RANCHI-SIPAT	2	208	147	0.0	0.2	-0.2
6	220 kV	BUDHIPADAR-RAIGARH	1	3	133	0.0	1.7	-1.7
7	220 kV	BUDHIPADAR-KORBA	2	95	82	0.5	0.0	0.5
ER-WR						8.1	32.0	-23.9
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	330	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1855	0.0	36.4	-36.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	2387	0.0	38.8	-38.8
4	400 kV	TALCHER-I/C	2	620	99	8.2	0.0	8.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	82.5	-82.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	258	107	2.3	0.0	2.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	867	87	9.2	0.0	9.2
3	220 kV	ALIPURDUAR-SALAKATI	2	99	7	0.6	0.0	0.6
ER-NER						12.1	0.0	12.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	662	0	14.9	0.0	14.9
NER-NR						14.9	0.0	14.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KIRUKSHETRA	2	0	4513	0.0	56.1	-56.1
2	HVDC	VINDHYACHAL B/B	-	90	483	2.0	1.7	0.3
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1913	0.0	25.0	-25.0
4	765 kV	GWALIOR-AGRA	2	0	3140	0.0	47.0	-47.0
5	765 kV	GWALIOR-PHAGI	2	0	1295	0.0	20.7	-20.7
6	765 kV	JABALPUR-ORAI	2	0	1318	0.0	31.6	-31.6
7	765 kV	GWALIOR-ORAI	1	953	0	13.0	0.0	13.0
8	765 kV	SATNA-ORAI	1	0	1302	0.0	23.9	-23.9
9	765 kV	BANASKANTHA-CHITORGARH	2	901	751	9.3	0.7	8.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	3713	0.0	60.3	-60.3
11	400 kV	ZERDA-KANKROLI	1	148	145	1.0	0.2	0.8
12	400 kV	ZERDA -BHINMAL	1	477	418	2.7	1.6	1.1
13	400 kV	VINDHYACHAL -RIHAND	1	976	0	21.4	0.0	21.4
14	400 kV	RAPP-SHUALPUR	2	71	689	0.1	5.1	-5.0
15	220 kV	BHANPURA-RANPUR	1	168	61	1.5	0.1	1.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.1	-1.1
17	220 kV	MEHGAON-AURAIYA	1	80	29	0.6	0.0	0.6
18	220 kV	MALANPUR-AURAIYA	1	53	51	0.2	0.2	0.0
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						51.8	275.4	-223.6
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	307	0.0	7.2	-7.2
2	HVDC	RAIGARH-PUGALUR	2	0	606	0.0	14.5	-14.5
3	765 kV	SOLAPUR-RAICHUR	2	1569	1546	11.7	8.7	3.0
4	765 kV	WARDHA-NIZAMABAD	2	315	2412	0.2	27.2	-27.0
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2467	0.0	26.8	-26.8
6	400 kV	KOLHAPUR-KUDGI	2	1606	0	23.2	0.0	23.2
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	123	2.1	0.0	2.1
WR-SR						37.2	84.5	-47.3

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)	0	0	0	-3.39
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	0	0	0	-3.87
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-4.10
	NER	132kV GELEPHU-SALAKATI	-42	-17	-31	-0.74
	NER	132kV MOTANGA-RANGIA	-19	12	-1	-0.04
NEPAL	NR	NEPAL IMPORT (FROM UP)	-70	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-70	0	-53	-1.27
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-366	-94	-313	-7.52
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-921	-587	-795	-19.07
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-905	-554	-725	-17.39
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-125	0	-97	-2.32

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 16-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	11.25	0.00	0.00	0.07	0.00	0.00	11.32
Nepal	0.26	0.00	7.04	0.00	0.00	0.00	0.00	0.00	7.30
Bangladesh	18.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.99
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	19.25	0.00	18.29	0.00	0.00	0.07	0.00	0.00	37.61

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
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	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49

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	0.49	0.00	-11.25	0.00	0.00	-0.07	0.00	0.00	-10.83
Nepal	-0.26	0.00	-7.04	0.00	0.00	0.00	0.00	0.00	-7.30
Bangladesh	-18.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.99
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-18.76	0.00	-18.29	0.00	0.00	-0.07	0.00	0.00	-37.12