



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: 18th 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 17.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 17-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 17th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 18-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)	60118	61307	43216	20501	2646	187788
Peak Shortage (MW)	1022	0	0	1038	58	2118
Energy Met (MU)	1295	1485	1082	448	47	4357
Hydro Gen (MU)	96	45	49	24	11	224
Wind Gen (MU)	15	31	33	-	-	79
Solar Gen (MU)*	90.24	59.52	114.97	4.52	0.56	270
Energy Shortage (MU)	15.78	1.38	0.00	8.26	0.55	25.97
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	64517	74356	55640	21615	2668	214411
Time Of Maximum Demand Met	12:41	10:21	10:22	18:03	17:35	10:51

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	0.052	0.67	1.27	7.37	9.32	77.22	13.46

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	9076	0	161.6	55.2	0.1	223	0.00
	Haryana	9090	63	167.4	100.3	0.5	211	1.66
	Rajasthan	17370	302	328.7	113.3	-1.1	281	5.42
	Delhi	5523	0	93.0	78.1	0.1	384	0.00
	UP	20674	0	389.4	131.3	-2.2	955	5.74
	Uttarakhand	2440	0	47.4	35.8	0.9	178	0.41
	HP	2026	27	37.0	31.4	0.8	178	0.70
	J&K(UT) & Ladakh(UT)	2984	293	62.1	56.7	0.7	383	1.85
	Chandigarh	301	0	5.0	5.1	-0.1	43	0.00
Railways NR ISTS	196	0	3.6	3.3	0.3	73	0.00	
WR	Chhattisgarh	5167	74	108.1	55.4	0.7	432	0.47
	Gujarat	21159	0	413.2	154.9	-0.2	496	0.00
	MP	17086	0	316.1	187.0	-3.1	855	0.00
	Maharashtra	27714	0	573.7	179.2	-0.7	926	0.91
	Goa	660	0	13.2	12.8	-0.1	51	0.00
	DNHDDPDCL	1267	0	29.0	28.8	0.2	75	0.00
	AMNSIL	852	0	18.8	10.2	-0.4	282	0.00
	BALCO	521	0	12.4	12.5	-0.1	11	0.00
SR	Andhra Pradesh	10989	0	196.1	68.3	-1.6	721	0.00
	Telangana	13358	0	249.1	118.2	-1.6	523	0.00
	Karnataka	15250	0	279.5	123.5	-0.5	1410	0.00
	Kerala	4155	0	82.3	64.2	0.5	256	0.00
	Tamil Nadu	13610	0	268.3	152.2	-2.0	556	0.00
	Puducherry	270	0	6.2	5.9	-0.3	19	0.00
ER	Bihar	4923	275	100.8	98.1	1.9	275	5.11
	DVC	3330	0	69.6	-44.0	0.2	427	0.00
	Jharkhand	1651	0	31.0	22.6	-0.7	243	3.15
	Odisha	4637	0	97.6	16.6	-0.8	365	0.00
	West Bengal	7073	0	147.4	28.7	-1.6	220	0.00
	Sikkim	123	0	2.1	2.1	0.0	43	0.00
	Railways ER ISTS	6	0	0.0	0.1	-0.1	2	0.00
NER	Arunachal Pradesh	172	0	2.9	2.8	0.0	32	0.00
	Assam	1458	0	26.1	20.9	0.7	128	0.00
	Manipur	206	20	3.1	2.8	0.3	56	0.19
	Meghalaya	330	38	6.5	4.9	-0.1	62	0.36
	Mizoram	154	0	2.3	1.8	-0.2	30	0.00
	Nagaland	145	0	2.3	2.2	0.1	34	0.00
	Tripura	221	0	4.0	3.1	-0.2	26	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-10.6	-9.2	-18.6	-26.4
Day Peak (MW)	-706.5	-417.0	-884.0	-1386.9

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	285.7	-244.2	93.5	-139.7	4.7	0.0
Actual(MU)	299.5	-262.4	87.9	-139.3	4.8	-9.5
O/D/U/D(MU)	13.7	-18.2	-5.7	0.5	0.1	-9.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	7886	8274	3908	4516	452	25035	49
State Sector	6501	10110	6555	2899	302	26366	51
Total	14386	18383	10463	7415	754	51401	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	795	1634	703	642	11	3785	80
Lignite	27	21	63	0	0	112	2
Hydro	96	45	49	24	11	224	5
Nuclear	26	31	73	0	0	129	3
Gas, Naptha & Diesel	17	43	5	0	26	91	2
RES (Wind, Solar, Biomass & Others)	129	94	173	6	1	402	8
Total	1091	1867	1066	672	48	4744	100

Share of RES in total generation (%)	11.83	5.03	16.19	0.90	1.19	8.47
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.01	9.07	27.63	4.40	23.51	15.93

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.020
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	214411	10:51	3885
Non-Solar hr	195309	17:00	956

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 -> 07:00 to 17:00hrs 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: 18-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	-	2	49	0.0	1.3	-1.3
3	765 kV	GAYA-VARANASI	2	0	759	0.0	11.2	-11.2
4	765 kV	SASARAM-FATEHPUR	1	0	452	0.0	7.1	-7.1
5	765 kV	GAYA-BALIA	1	0	888	0.0	14.8	-14.8
6	400 kV	PUSAULI-VARANASI	1	51	33	0.3	0.0	0.3
7	400 kV	PUSAULI-ALLAHABAD	1	9	53	0.0	0.5	-0.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	693	0.0	8.4	-8.4
9	400 kV	PATNA-BALIA	2	0	632	0.0	11.7	-11.7
10	400 kV	NAUBATPUR-BALIA	2	0	664	0.0	12.2	-12.2
11	400 kV	BIHARSHARIFF-BALIA	2	0	350	0.0	4.9	-4.9
12	400 kV	MOTIHARI-GORAKHPUR	2	0	562	0.0	9.6	-9.6
13	400 kV	BIHARSHARIFF-VARANASI	2	0	380	0.0	5.9	-5.9
14	220 kV	SAHUPURI-KARAMNUSA	1	0	101	0.0	1.9	-1.9
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-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						0.8	89.6	-88.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	110	1118	0.0	9.8	-9.8
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1028	123	9.4	0.0	9.4
3	765 kV	JHARSUGUDA-DURG	2	0	642	0.0	12.3	-12.3
4	400 kV	JHARSUGUDA-RAIGARH	4	0	799	0.0	13.0	-13.0
5	400 kV	RANCHI-SIPAT	2	170	155	0.0	0.3	-0.3
6	220 kV	BUDHIPADAR-RAIGARH	1	6	130	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	73	115	0.1	0.0	0.1
ER-WR						9.5	36.8	-27.3
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	369	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1493	0.0	67.6	-67.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2202	0.0	38.8	-38.8
4	400 kV	TALCHER-I/C	2	714	0	10.8	0.0	10.8
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	113.7	-113.7
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	189	63	1.5	0.1	1.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	670	11	7.4	0.0	7.4
3	220 kV	ALIPURDUAR-SALAKATI	2	111	2	1.5	0.0	1.5
ER-NER						10.3	0.1	10.3
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	661	0	15.6	0.0	15.6
NER-NR						15.6	0.0	15.6
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4008	0.0	45.5	-45.5
2	HVDC	VINDHYACHAL B/B	-	0	101	0.0	2.4	-2.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1911	0.0	38.7	-38.7
4	765 kV	GWALIOR-AGRA	2	0	3060	0.0	46.8	-46.8
5	765 kV	GWALIOR-PHAGI	2	0	1285	0.0	21.5	-21.5
6	765 kV	JABALPUR-ORAI	2	0	1307	0.0	38.2	-38.2
7	765 kV	GWALIOR-ORAI	1	945	0	15.4	0.0	15.4
8	765 kV	SATNA-ORAI	1	0	1170	0.0	22.4	-22.4
9	765 kV	BANASKANTHA-CHITORGARH	2	946	792	7.5	1.1	6.4
10	765 kV	VINDHYACHAL-VARANASI	2	0	3628	0.0	58.5	-58.5
11	400 kV	ZERDA-KANKROLI	1	99	138	0.8	0.3	0.5
12	400 kV	ZERDA -BHINMAL	1	420	305	1.7	1.6	0.1
13	400 kV	VINDHYACHAL -RIHAND	1	974	0	22.4	0.0	22.4
14	400 kV	RAPP-SHUALPUR	2	36	577	0.0	5.0	-5.0
15	220 kV	BHANPURA-RANPUR	1	158	158	1.3	0.2	1.1
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.2	-1.2
17	220 kV	MEHGAON-AURAIYA	1	65	21	0.7	0.2	0.5
18	220 kV	MALANPUR-AURAIYA	1	39	45	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						49.8	283.6	-233.8
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	2003	0.0	30.5	-30.5
3	765 kV	SOLAPUR-RAICHUR	2	1604	1256	9.9	5.0	4.9
4	765 kV	WARDHA-NIZAMABAD	2	0	2013	0.0	23.1	-23.1
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2030	0.0	24.4	-24.4
6	400 kV	KOLHAPUR-KUDGI	2	1557	0	22.4	0.0	22.4
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	112	2.1	0.0	2.1
WR-SR						34.3	90.1	-55.8

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)	-238	-15	-152	-3.65
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-265	207	-93	-2.24
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-226	-79	-170	-4.07
	NER	132kV GELEPHU-SALAKATI	-31	-1	-26	-0.62
	NER	132kV MOTANGA-RANGIA	-31	0	-1	-0.03
NEPAL	NR	NEPAL IMPORT (FROM UP)	-77	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-77	0	-56	-1.35
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-417	-92	-328	-7.88
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-780	-585	-694	-16.66
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1387	-800	-1100	-26.39
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-104	0	-81	-1.94

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 18-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	11.17	0.00	0.00	0.17	0.00	0.00	11.34
Nepal	0.23	0.00	7.55	0.00	0.00	0.08	0.00	0.00	7.86
Bangladesh	16.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.63
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	16.86	0.00	18.72	0.00	0.00	0.25	0.00	0.00	35.83

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
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	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48

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	0.48	0.00	-11.17	0.00	0.00	-0.17	0.00	0.00	-10.86
Nepal	-0.23	0.00	-7.55	0.00	0.00	-0.08	0.00	0.00	-7.86
Bangladesh	-16.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-16.63
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-16.38	0.00	-18.72	0.00	0.00	-0.25	0.00	0.00	-35.35