



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: 10th 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 09.01.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-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 09th January 2024, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 10-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)	61071	59817	43483	19884	2713	186968
Peak Shortage (MW)	0	0	0	498	40	538
Energy Met (MU)	1248	1432	1069	429	48	4226
Hydro Gen (MU)	95	29	43	18	11	197
Wind Gen (MU)	19	174	82	-	-	275
Solar Gen (MU)*	79.78	44.03	60.20	4.90	0.91	190
Energy Shortage (MU)	3.49	0.36	0.00	5.73	0.45	10.03
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	63796	71834	53984	21453	2742	207039
Time Of Maximum Demand Met	12:06	09:59	09:39	18:12	17:46	09:58

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	0.037	0.00	0.29	1.31	1.60	72.58	25.82

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	8449	0	158.9	62.6	0.0	234	0.00
	Haryana	9373	0	164.4	103.3	-0.2	242	2.28
	Rajasthan	16884	0	319.7	112.0	-2.0	318	0.00
	Delhi	5372	0	91.3	79.3	-1.1	271	0.00
	UP	20567	0	356.0	132.7	0.4	900	0.00
	Uttarakhand	2422	0	46.5	35.4	0.9	254	0.26
	HP	2055	0	37.3	31.7	0.6	268	0.56
	J&K(UT) & Ladakh(UT)	2990	85	64.9	61.2	-1.1	221	0.39
	Chandigarh	312	0	5.5	5.5	-0.1	78	0.00
Railways NR ISTS	178	0	3.4	3.4	0.0	43	0.00	
WR	Chhattisgarh	5114	0	105.1	43.1	-0.8	317	0.00
	Gujarat	21037	0	407.6	110.1	-4.5	806	0.00
	MP	14484	0	274.8	165.4	-3.8	560	0.00
	Maharashtra	28074	173	568.3	180.7	1.1	1390	0.36
	Goa	695	0	14.6	14.3	-0.3	44	0.00
	DNHDDPDCL	1293	0	29.7	29.4	0.3	44	0.00
	AMNSIL	893	0	19.2	10.2	-0.1	321	0.00
	BALCO	524	0	12.5	12.5	0.0	15	0.00
SR	Andhra Pradesh	10810	0	198.4	55.9	-3.4	426	0.00
	Telangana	13579	0	245.7	129.6	2.2	610	0.00
	Karnataka	13585	0	247.3	109.4	-0.2	827	0.00
	Kerala	3935	0	81.6	68.3	0.5	471	0.00
	Tamil Nadu	14480	0	287.6	181.7	-1.7	840	0.00
	Puducherry	384	0	8.3	8.1	-0.5	20	0.00
ER	Bihar	4872	360	92.8	81.0	-0.3	336	0.25
	DVC	3328	0	71.6	-49.7	0.3	267	0.00
	Jharkhand	1597	0	28.0	22.3	-1.0	275	5.48
	Odisha	4620	0	90.4	24.5	-0.9	249	0.00
	West Bengal	6926	0	144.6	35.5	-2.1	180	0.00
	Sikkim	126	0	2.0	2.1	-0.1	14	0.00
Railways ER ISTS	12	0	0.1	0.1	0.0	2	0.00	
NER	Arunachal Pradesh	174	0	2.7	2.7	-0.2	32	0.00
	Assam	1555	0	26.6	22.4	-0.6	166	0.00
	Manipur	212	0	3.3	3.2	0.1	39	0.19
	Meghalaya	334	40	6.5	5.1	-0.2	74	0.26
	Mizoram	150	0	2.3	1.9	-0.1	22	0.00
	Nagaland	140	0	2.3	2.3	-0.1	14	0.00
Tripura	225	0	4.1	3.1	-0.2	46	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	-10.1	-7.7	-20.8	-16.1
Day Peak (MW)	-729.0	-403.0	-1027.0	-773.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	310.5	-363.8	161.9	-112.0	3.5	0.0
Actual(MU)	308.0	-371.5	169.2	-114.5	2.1	-6.6
O/D/U/D(MU)	-2.5	-7.7	7.4	-2.5	-1.4	-6.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6469	7969	5758	5741	315	26251	50
State Sector	6826	9512	6140	3632	281	26391	50
Total	13295	17481	11898	9373	596	52642	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	740	1610	627	600	15	3592	78
Lignite	32	13	54	0	0	98	2
Hydro	95	29	43	18	11	197	4
Nuclear	21	37	76	0	0	135	3
Gas, Naptha & Diesel	20	23	7	0	24	73	2
RES (Wind, Solar, Biomass & Others)	122	220	170	6	1	520	11
Total	1029	1932	977	625	52	4615	100

Share of RES in total generation (%)	11.86	11.39	17.43	1.03	1.77	11.26
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	23.16	14.83	29.65	3.97	23.62	18.45

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.032
Based on State Max Demands	1.071

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	207039	9:58	1604
Non-Solar hr	195447	18:31	548

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: 10-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	88	857	0.0	9.6	-9.6
4	765 kV	SASARAM-FATEHPUR	1	0	468	0.0	6.8	-6.8
5	765 kV	GAYA-BALIA	1	0	657	0.0	12.4	-12.4
6	400 kV	PUSAULI-VARANASI	1	29	46	0.0	0.1	-0.1
7	400 kV	PUSAULI-ALLAHABAD	1	0	79	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	606	0.0	7.2	-7.2
9	400 kV	PATNA-BALIA	2	0	563	0.0	10.1	-10.1
10	400 kV	NAUBATPUR-BALIA	2	0	595	0.0	10.4	-10.4
11	400 kV	BIHARSHARIFF-BALIA	2	0	336	0.0	4.4	-4.4
12	400 kV	MOTIHARI-GORAKHPUR	2	0	458	0.0	7.3	-7.3
13	400 kV	BIHARSHARIFF-VARANASI	2	0	358	0.0	4.9	-4.9
14	220 kV	SAHUPURI-KARAMNANA	1	2	136	0.0	1.3	-1.3
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	76.9	-76.4
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	799	396	4.5	0.0	4.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	954	591	4.5	0.0	4.5
3	765 kV	JHARSUGUDA-DURG	2	0	879	0.0	16.1	-16.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	511	0.0	6.6	-6.6
5	400 kV	RANCHI-SIPAT	2	221	182	0.6	0.0	0.6
6	220 kV	BUDHIPADAR-RAIGARH	1	24	95	0.0	1.0	-1.0
7	220 kV	BUDHIPADAR-KORBA	2	136	48	1.3	0.0	1.3
ER-WR						10.9	23.7	-12.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	328	0.0	5.4	-5.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1641	0.0	69.5	-69.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	2490	0.0	44.0	-44.0
4	400 kV	TALCHER-I/C	2	607	0	0.0	9.0	-9.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	118.9	-118.9
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	228	53	2.2	0.0	2.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	735	0	9.3	0.0	9.3
3	220 kV	ALIPURDUAR-SALAKATI	2	110	1	1.5	0.0	1.5
ER-NER						13.0	0.0	13.0
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIAL-AGRA	2	660	0	15.7	0.0	15.7
NER-NR						15.7	0.0	15.7
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	7	4017	0.0	59.3	-59.3
2	HVDC	VINDHYACHAL B/B	-	91	0	2.4	0.0	2.4
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1545	0.0	31.2	-31.2
4	765 kV	GWALIOR-AGRA	2	0	3089	0.0	46.8	-46.8
5	765 kV	GWALIOR-PHAGI	2	0	1207	0.0	16.6	-16.6
6	765 kV	JABALPUR-ORAI	2	0	1276	0.0	33.8	-33.8
7	765 kV	GWALIOR-ORAI	1	749	0	12.0	0.0	12.0
8	765 kV	SATNA-ORAI	1	0	1136	0.0	21.6	-21.6
9	765 kV	BANASKANTHA-CHITORGARH	2	6	1660	0.0	17.3	-17.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	3328	0.0	50.3	-50.3
11	400 kV	ZERDA-KANKROLI	1	8	232	0.0	2.3	-2.3
12	400 kV	ZERDA-BHINMAL	1	304	484	0.7	4.5	-3.8
13	400 kV	VINDHYACHAL-RIHAND	1	964	0	22.1	0.0	22.1
14	400 kV	RAPP-SHUJALPUR	2	245	562	0.8	3.4	-2.6
15	220 kV	BHANPURA-RANPUR	1	0	142	0.0	2.4	-2.4
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.0	-1.0
17	220 kV	MEHGAON-AURAIYA	1	64	36	0.3	0.1	0.2
18	220 kV	MALANPUR-AURAIYA	1	21	52	0.0	0.2	-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						38.4	290.9	-252.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1013	0.0	22.0	-22.0
2	HVDC	RAIGARH-PUGALUR	2	0	4511	0.0	45.3	-45.3
3	765 kV	SOLAPUR-RAICHUR	2	1155	1708	3.2	10.0	-6.8
4	765 kV	WARDHA-NIZAMABAD	2	0	3024	0.0	41.1	-41.1
5	765 kV	WARORA-WARANGAL(NEW)	2	0	2726	0.0	36.7	-36.7
6	400 kV	KOLHAPUR-KUDGI	2	1225	0	17.9	0.0	17.9
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						23.4	155.0	-131.7

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)	-250	-21	-148	-3.54
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	-260	222	-70	-1.67
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	-227	-75	-170	-4.07
	NER	132kV GELEPHU-SALAKATI	-39	0	-4	-0.10
	NER	132kV MOTANGA-RANGIA	-7	0	-28	-0.68
NEPAL	NR	NEPAL IMPORT (FROM UP)	-70	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-70	0	-55	-1.33
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-403	-62	-266	-6.38
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-908	-583	-774	-18.58
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-773	-409	-672	-16.13
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-119	0	-94	-2.26

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 10-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	10.88	0.00	0.00	0.01	0.00	0.00	10.89
Nepal	0.27	0.00	6.33	0.00	0.00	0.29	0.00	0.00	6.89
Bangladesh	18.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.52
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	18.79	0.00	17.21	0.00	0.00	0.30	0.00	0.00	36.30

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
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	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98

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	0.98	0.00	-10.88	0.00	0.00	-0.01	0.00	0.00	-9.91
Nepal	-0.27	0.00	-6.33	0.00	0.00	-0.29	0.00	0.00	-6.89
Bangladesh	-18.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-18.52
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	-17.81	0.00	-17.21	0.00	0.00	-0.30	0.00	0.00	-35.32