



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: 22.07.2024

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 21.07.2024.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-जुलाई-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 21.07.2024, is available at the NLDC website.

धन्यवाद,
Thanks

Report for previous day

Date of Reporting: 22-Jul-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 20:00 hrs; from RLDCs)	81558	55320	39199	27515	3344	206936
Peak Shortage (MW)	296	434	0	300	0	1030
Energy Met (MU)	1884	1321	934	614	67	4820
Hydro Gen (MU)	396	40	104	79	35	653
Wind Gen (MU)	5	113	307	-	-	426
Solar Gen (MU)*	156.19	70.89	85.50	1.96	0.87	315
Energy Shortage (MU)	5.52	3.99	0.00	3.66	0.00	13.17
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	83005	56967	43455	29501	3333	207822
Time Of Maximum Demand Met	22:13	10:41	09:20	22:52	19:57	21:02

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	0.024	0.00	0.00	3.03	3.03	83.73	13.24

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	15854	0	366.8	220.8	0.1	193	0.00
	Haryana	12903	0	277.5	207.2	0.5	244	0.00
	Rajasthan	15424	0	332.3	125.1	2.6	673	4.36
	Delhi	7123	0	145.8	121.4	0.2	311	0.00
	UP	29462	0	612.7	291.0	0.8	335	0.00
	Uttarakhand	2280	0	49.7	26.1	0.1	214	0.68
	HP	1531	0	34.4	-3.5	0.1	109	0.00
	J&K(UT) & Ladakh(UT)	2599	70	52.9	27.3	-0.3	348	0.48
	Chandigarh	383	0	7.6	7.3	0.3	67	0.00
	Railways NR ISTS	211	0	4.4	3.6	0.9	108	0.00
WR	Chhattisgarh	5181	0	117.9	72.3	-2.0	250	0.00
	Gujarat	17700	0	398.7	138.1	-5.8	351	0.00
	MP	11921	0	261.9	149.3	0.6	751	3.99
	Maharashtra	21474	0	470.1	148.8	-10.7	485	0.00
	Goa	575	0	12.4	11.4	1.0	104	0.00
	DNHDDPCL	1239	0	28.4	28.5	-0.1	60	0.00
	AMNSIL	812	0	18.8	6.5	0.2	280	0.00
	BALCO	529	0	12.6	12.6	0.0	10	0.00
	Andhra Pradesh	8706	0	182.9	19.8	-1.7	789	0.00
	Telangana	9116	0	179.4	102.3	1.2	820	0.00
SR	Karnataka	8712	0	165.8	-45.0	-1.8	788	0.00
	Kerala	3679	0	72.4	41.8	0.3	229	0.00
	Tamil Nadu	14441	0	324.7	117.9	-7.5	528	0.00
	Puducherry	432	0	9.2	8.7	0.0	40	0.00
	Bihar	7641	0	162.2	150.4	0.1	610	2.13
ER	DVC	3357	0	72.9	-36.0	-0.4	476	0.00
	Jharkhand	2166	300	43.9	33.8	-1.2	178	1.53
	Odisha	5475	0	111.6	35.0	-3.0	431	0.00
	West Bengal	10850	0	222.0	85.6	-1.7	296	0.00
	Sikkim	65	0	1.0	1.0	0.0	17	0.00
	Railways ER ISTS	15	0	0.2	0.1	0.1	4	0.00
	Assam	167	0	3.1	2.6	0.1	37	0.00
NER	Assam	2237	0	44.9	37.6	0.3	149	0.00
	Manipur	188	0	2.9	3.0	-0.2	16	0.00
	Meghalaya	282	0	5.4	-0.8	-0.1	37	0.00
	Mizoram	104	0	2.1	0.7	-0.1	3	0.00
	Nagaland	165	0	3.1	2.7	-0.1	16	0.00
	Tripura	318	0	6.1	5.8	0.4	57	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	36.5	15.7	-24.4	-24.8
Day Peak (MW)	2200.8	773.7	-1029.0	-1369.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	447.6	-255.1	-136.0	-59.0	2.4	0.0
Actual(MU)	454.0	-238.1	-167.0	-57.0	0.1	-7.9
OD/U/D(MU)	6.4	17.0	-31.0	2.0	-2.3	-7.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3827	13691	7238	5376	280	30411	55
State Sector	3581	10315	8893	1459	157	24404	45
Total	7408	24005	16131	6835	437	54815	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	373	1365	524	656	14	3431	66
Lignite	32	11	50	0	0	93	2
Hydro	396	40	104	79	35	653	13
Nuclear	30	60	76	0	0	166	3
Gas, Naptha & Diesel	30	29	6	0	23	87	2
RES (Wind, Solar, Biomass & Others)	169	185	412	3	1	770	15
Total	1529	1690	1171	738	73	5200	100

Share of RES in total generation (%)

	11.06	10.94	35.17	0.46	1.20	14.81
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.88	16.87	50.56	11.14	49.06	30.56

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.040
Based on State Max Demands	1.084

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	206054	11:36	0
Non-Solar hr	207822	21:02	1620

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: 22-Jul-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	701	0.0	18.4	-18.4	
2	HVDC	PUSAULI B/B	-	0	95	0.0	2.3	-2.3	
3	765 kV	GAYA-VARANASI	2	739	673	0.0	3.5	-3.5	
4	765 kV	SASARAM-FATEHPUR	1	262	289	0.0	1.8	-1.8	
5	765 kV	GAYA-BALIA	1	0	840	0.0	14.2	-14.2	
6	400 kV	PUSAULI-VARANASI	1	0	108	0.0	1.3	-1.3	
7	400 kV	PUSAULI-ALI AHARAD	1	14	85	0.0	1.1	-1.1	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	746	0.0	12.6	-12.6	
9	400 kV	PATNA-BALIA	2	166	560	0.0	5.4	-5.4	
10	400 kV	NAUBATPUR-BALIA	2	115	143	0.0	1.1	-1.1	
11	400 kV	BIHARSHARIFF-BALIA	2	246	123	0.1	0.0	0.1	
12	400 kV	MOTIHARI-GORAKHPUR	2	11	354	0.0	5.5	-5.5	
13	400 kV	BIHARSHARIFF-VARANASI	2	145	286	0.0	3.2	-3.2	
14	220 kV	SAHPURI-KARAMNANA	1	59	72	0.0	0.6	-0.6	
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0	
16	132 kV	GARWAL-RIHAND	1	0	0	0.6	0.0	0.6	
17	132 kV	KARMANASA-SAHPURI	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	71.0	-70.3	
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1714	0.0	24.0	-24.0	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1701	0	35.1	0.0	35.1	
3	765 kV	JHARSUGUDA-DURG	2	265	403	0.0	2.1	-2.1	
4	400 kV	JHARSUGUDA-RAIGARH	4	0	514	0.0	7.7	-7.7	
5	400 kV	RANCHISAT	2	559	0	7.0	0.0	7.0	
6	220 kV	BUDDHAPADAR-RAIGARH	1	23	90	0.0	1.1	-1.1	
7	220 kV	BUDDHAPADAR-KORBA	2	0	126	0.0	1.8	-1.8	
						ER-WR	42.1	36.6	5.5
Import/Export of ER (With SR)									
1	HVDC	JEVPORE-GAZUWAKA B/B	2	756	0	18.0	0.0	18.0	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	292	0.0	7.3	-7.3	
3	765 kV	ANGUL-SRIKAKULAM	2	0	1753	0.0	22.2	-22.2	
4	400 kV	TALCHER-I/C	2	1121	0	22.0	0.0	22.0	
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0	
						ER-SR	18.0	29.5	-11.5
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	2	283	0.0	4.0	-4.0	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	36	375	0.0	5.0	-5.0	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	88	0.0	1.3	-1.3	
						ER-NER	10.3	-10.3	
Import/Export of NER (With NR)									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	504	0.0	12.1	-12.1	
						NER-NR	12.1	-12.1	
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4527	0.0	102.1	-102.1	
2	HVDC	VINDHYACHAL B/B	-	0	186	0.0	1.7	-1.3	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	2357	0.0	49.2	-49.2	
4	765 kV	GWALIOR-AGRA	2	0	2912	0.0	50.0	-50.0	
5	765 kV	GWALIOR-PHAGI	2	381	1936	0.8	24.8	-24.0	
6	765 kV	JABALPUR-ORAI	2	0	1521	0.0	54.4	-54.4	
7	765 kV	GWALIOR-ORAI	1	829	0	13.4	0.0	13.4	
8	765 kV	SATNA-ORAI	1	0	1094	0.0	21.5	-21.5	
9	765 kV	BANASKANTHA-CHITTOGARH	2	601	1376	1.3	11.3	-10.1	
10	765 kV	VINDHYACHAL-VARANASI	2	0	3891	0.0	78.1	-78.1	
11	400 kV	ZERDA-KANKROLI	1	138	263	0.4	2.1	-1.7	
12	400 kV	ZERDA-BHNMAL	1	96	182	0.3	1.4	-1.2	
13	400 kV	VINDHYACHAL -RIHAND	1	973	0	21.9	0.0	21.9	
14	400 kV	RAPP-SHUALPUR	2	125	678	0.3	8.4	-8.1	
15	400 kV	NEEMUCH-Chitorgarh	2	139	717	0.3	8.5	-8.2	
16	220 kV	BHANPURA-RANPUR	1	0	115	0.0	2.1	-2.1	
17	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.0	-2.0	
18	220 kV	MEHGAON-AURAIYA	1	56	38	0.5	0.0	0.4	
19	220 kV	MALANPUR-AURAIYA	1	27	52	0.1	0.3	-0.1	
20	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0	
21	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0	
						WR-NR	39.6	417.8	-378.2
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	995	0	23.9	0.0	23.9	
2	HVDC	RAIGARH-PUGALUR	2	1445	0	19.8	0.0	19.8	
3	765 kV	SOLAPUR-RAICHUR	2	2934	0	47.3	0.0	47.3	
4	765 kV	WARDHA-NIZAMABAD	2	802	958	5.7	4.1	1.6	
5	765 kV	WARORA-WARANGAL(NEW)	2	744	896	6.0	3.7	2.3	
6	400 kV	KOLHAPUR-KUDGI	2	0	2531	0.0	48.3	-48.3	
7	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0	
8	220 kV	PONDA-AMBEWADI	1	0	68	1.6	0.0	1.6	
9	220 kV	XELDEM-AMBEWADI	1	1	86	1.0	0.0	1.0	
						WR-SR	153.6	7.8	145.8

INTERNATIONAL EXCHANGES

Import(+ve)/Export(-ve) Energy Exchange (MU)

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)	785	681	759	18.21
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	972	847	849	20.37
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	237	89	-170	-4.09
	NER	132kV GELEPHU-SALAKATI	44	27	33	0.80
	NER	132kV MOTANGA-RANGIA	64	39	52	1.25
NEPAL	NR	NEPAL IMPORT (FROM UP)	0	0	0	0.00
	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	66	0	45	1.09
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
BANGLADESH	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	708	287	607	14.56
	ER	BHERAMARA B/B HVDC (B'DESH)	-937	-935	-936	-22.46
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1369	-805	-1031	-24.75
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-92	0	-79	-1.90

CROSS BORDER EXCHANGE SCHEDULE

Date of Reporting: 22-Jul-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nepal	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
Bangladesh	22.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.15
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Export	22.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.22

Import by India(in MU)

Country	GNA (ISGA/PPA)	T-GNA							TOTAL
		BILATERAL TOTAL	COLLECTIVE						
			IDAM			RTM			
			IEX	PXIL	HPX	IEX	PXIL	HPX	
Bhutan	37.98	0.00	1.26	0.00	0.00	0.00	0.00	0.00	39.24
Nepal	2.63	0.00	11.72	0.00	0.00	0.46	0.00	0.00	14.81
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	40.61	0.00	12.98	0.00	0.00	0.46	0.00	0.00	54.05

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	37.98	0.00	1.26	0.00	0.00	0.00	0.00	0.00	39.24
Nepal	2.56	0.00	11.72	0.00	0.00	0.46	0.00	0.00	14.74
Bangladesh	-22.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-22.15
Myanmar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net	18.39	0.00	12.98	0.00	0.00	0.46	0.00	0.00	31.83