



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: 14th July 2023

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 13.07.2023.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 13-जुलाई-2023 की अखिल भारतीय प्रणाली की दैनिक ग्रीड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 13th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 14-Jul-2023

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)	66179	56405	46660	25054	3094	197392
Peak Shortage (MW)	776	822	0	0	54	1652
Energy Met (MU)	1488	1316	1096	613	62	4574
Hydro Gen (MU)	278	62	55	132	36	565
Wind Gen (MU)	52	110	192	-	-	354
Solar Gen (MU)*	137.60	49.23	102.37	5.40	0.80	295
Energy Shortage (MU)	2.71	2.40	0.95	2.20	1.12	9.38
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	68460	58531	51461	29625	3202	203212
Time Of Maximum Demand Met	22:41	19:21	10:54	23:06	18:55	14:55

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	1.38	3.33	4.71	70.85	24.44

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	13610	0	278.0	157.5	-0.5	244	0.00
	Haryana	9698	0	206.5	149.2	-0.7	295	0.00
	Rajasthan	12885	0	283.1	83.8	-0.4	425	1.71
	Delhi	6055	0	123.9	116.3	1.5	241	0.00
	UP	24432	0	462.6	187.3	-0.5	593	0.00
	Uttarakhand	1672	70	36.5	25.3	-0.2	146	0.46
	HP	1357	10	29.1	14.7	0.5	343	0.05
	J&K(UT) & Ladakh(UT)	2458	90	59.0	25.2	1.2	318	0.49
	Chandigarh	276	0	5.7	6.1	-0.4	6	0.00
Railways_NR ISTS	168	0	3.4	3.4	0.0	36	0.00	
WR	Chhattisgarh	5110	91	116.2	74.2	0.1	778	1.75
	Gujarat	16503	0	367.5	170.4	-4.0	668	0.00
	MP	10714	0	232.6	107.1	-7.2	233	0.00
	Maharashtra	23777	0	524.0	186.9	-6.9	792	0.65
	Goa	628	0	13.1	13.1	-0.3	47	0.00
	DNHDDPDCL	1303	0	30.6	30.3	0.3	53	0.00
	AMNSIL	885	0	19.8	10.6	-0.4	288	0.00
	BALCO	520	0	12.4	12.5	-0.1	4	0.00
SR	Andhra Pradesh	9557	0	207.1	51.4	-1.4	640	0.00
	Telangana	12415	0	244.1	128.9	2.8	1308	0.00
	Karnataka	11970	0	220.5	63.1	1.8	679	0.95
	Kerala	3802	0	77.9	55.9	1.7	319	0.00
	Tamil Nadu	15631	0	336.3	153.1	-3.4	482	0.00
	Puducherry	438	0	10.0	9.5	-0.2	56	0.00
ER	Bihar	6369	252	135.7	126.8	-0.7	379	2.20
	DVC	3404	0	77.0	-42.3	0.2	216	0.00
	Jharkhand	1848	0	40.7	34.4	1.6	172	0.00
	Odisha	7104	0	132.8	62.9	1.6	474	0.00
	West Bengal	10675	0	224.8	104.3	0.1	568	0.00
	Sikkim	86	0	1.5	1.5	0.0	14	0.00
	Railways_ER ISTS	16	0	0.1	0.3	-0.2	0	0.00
NER	Arunachal Pradesh	140	0	2.6	2.3	0.0	36	0.00
	Assam	2058	0	41.4	34.5	1.2	111	0.00
	Manipur	183	0	2.4	2.3	0.1	30	0.00
	Meghalaya	312	0	5.2	0.4	0.0	66	1.12
	Mizoram	121	0	1.9	1.6	-0.4	12	0.00
	Nagaland	166	0	2.7	2.5	-0.2	40	0.00
	Tripura	314	0	5.8	5.9	0.2	56	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.9	8.6	-25.2	-18.4
Day Peak (MW)	2037.0	520.0	-1095.0	-1520.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	296.4	-273.5	91.1	-104.6	-9.4	0.0
Actual(MU)	261.0	-268.2	110.0	-98.9	-9.2	-5.3
O/D/U/D(MU)	-35.4	5.4	18.9	5.6	0.3	-5.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3481	10027	7218	1975	338	23038	41
State Sector	8295	13626	7623	3530	322	33395	59
Total	11775	23653	14841	5505	660	56434	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	765	1396	583	636	16	3397	69
Lignite	25	17	51	0	0	93	2
Hydro	278	62	55	132	36	565	11
Nuclear	26	47	46	0	0	119	2
Gas, Naptha & Diesel	24	28	6	0	25	83	2
RES (Wind, Solar, Biomass & Others)	196	160	314	7	1	677	14
Total	1314	1710	1056	775	78	4933	100

Share of RES in total generation (%)	14.88	9.36	29.70	0.89	1.02	13.72
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.06	15.74	39.33	17.97	47.24	27.58

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.039
Based on State Max Demands	1.076

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	203212	14:55	0
Non-Solar hr	201511	22:39	915

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: 14-Jul-2023

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	1003	0.0	25.0	-25.0
2	HVDC	PUSAULI B/B	-	0	147	0.0	3.7	-3.7
3	765 kV	GAYA-VARANASI	2	295	414	0.0	1.9	-1.9
4	765 kV	SASARAM-FATEHPUR	1	26	374	0.0	4.2	-4.2
5	765 kV	GAYA-BALIA	1	0	628	0.0	8.8	-8.8
6	400 kV	PUSAULI-VARANASI	1	0	147	0.0	2.3	-2.3
7	400 kV	PUSAULI -ALLAHABAD	1	0	95	0.0	1.1	-1.1
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	700	0.0	12.0	-12.0
9	400 kV	PATNA-BALIA	2	0	513	0.0	9.5	-9.5
10	400 kV	NAUBATPUR-BALIA	2	0	528	0.0	9.4	-9.4
11	400 kV	BIHARSHARIFF-BALIA	2	20	272	0.0	4.1	-4.1
12	400 kV	MOTTHARI-GORAKHPUR	2	0	442	0.0	6.7	-6.7
13	400 kV	BIHARSHARIFF-VARANASI	2	153	128	0.0	0.8	-0.8
14	220 kV	SAHUPURI-KARAMNANA	1	0	136	0.0	2.0	-2.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.7	0.0	0.7
17	132 kV	KARMANASA-SAHUPURI	1	0	46	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						0.7	91.4	-90.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1647	0	28.5	0.0	28.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1681	588	17.9	0.0	17.9
3	765 kV	JHARSUGUDA-DURG	2	235	408	0.0	1.0	-1.0
4	400 kV	JHARSUGUDA-RAIGARH	4	0	536	0.0	5.7	-5.7
5	400 kV	RANCHI-SIPAT	2	364	225	2.2	0.0	2.2
6	220 kV	BUDHIPADAR-RAIGARH	1	0	106	0.0	2.1	-2.1
7	220 kV	BUDHIPADAR-KORBA	2	68	147	0.0	0.6	-0.6
ER-WR						48.6	9.4	39.2
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	447	0.0	10.1	-10.1
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1980	0.0	35.9	-35.9
3	765 kV	ANGUL-SRIKAKULAM	2	0	2183	0.0	38.6	-38.6
4	400 kV	TALCHER-I/C	2	104	646	0.0	2.9	-2.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						0.0	84.5	-84.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	122	259	0.4	1.4	-1.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	364	140	3.0	0.0	3.0
3	220 kV	ALIPURDUAR-SALAKATI	2	41	73	0.0	0.3	-0.3
ER-NER						3.3	1.7	1.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	354	0.0	8.5	-8.5
NER-NR						0.0	8.5	-8.5
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4021	0.0	53.6	-53.6
2	HVDC	VINDHYACHAL B/B	-	438	0	7.6	0.0	7.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1449	0.0	19.5	-19.5
4	765 kV	GWALIOR-AGRA	2	410	2211	0.5	25.8	-25.3
5	765 kV	GWALIOR-PHAGI	2	0	1614	0.0	22.0	-22.0
6	765 kV	JABALPUR-ORAI	2	94	1127	0.0	28.5	-28.5
7	765 kV	GWALIOR-ORAI	1	590	0	10.9	0.0	10.9
8	765 kV	SATNA-ORAI	1	0	1065	0.0	20.2	-20.2
9	765 kV	BANASKANTHA-CHITORGARH	2	1894	873	11.1	5.0	6.1
10	765 kV	VINDHYACHAL-VARANASI	2	0	3382	0.0	51.6	-51.6
11	400 kV	ZERDA-KANKROLI	1	347	112	2.3	0.4	1.9
12	400 kV	ZERDA -BHINMAL	1	751	80	7.5	0.1	7.3
13	400 kV	VINDHYACHAL -RIHAND	1	974	0	21.4	0.0	21.4
14	400 kV	RAPP-SHUJALPUR	2	322	623	1.1	5.4	-4.3
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.6	-2.6
17	220 kV	MEHGAON-AURAIYA	1	130	0	1.2	0.0	1.2
18	220 kV	MALANPUR-AURAIYA	1	103	0	1.8	0.0	1.8
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						65.3	234.5	-169.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1007	0.0	14.7	-14.7
2	HVDC	RAIGARH-PUGALUR	2	0	5516	0.0	52.3	-52.3
3	765 kV	SOLAPUR-RAICHUR	2	1702	806	11.1	1.2	9.9
4	765 kV	WARDHA-NIZAMABAD	2	0	2295	0.0	30.1	-30.1
5	400 kV	KOLHAPUR-KUDGI	2	1406	0	25.3	0.0	25.3
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	116	2.1	0.0	2.1
WR-SR						38.5	98.4	-59.8

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)	697	611	643	15.44	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1041	916	991	23.79	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	181	122	148	3.55	
	NER	132kV GELEPHU-SALAKATI	24	0	4	0.10	
	NER	132kV MOTANGA-RANGIA	59	33	45	1.07	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	-0.38	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	574	0	376	9.03	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-913	-794	-888	-21.31	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-1520	-572	-768	-18.42	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-182	0	-160	-3.85	