



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: 30th 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 29.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 29-जुलाई-2023 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 29th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 30-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)	65610	53382	45771	23813	3398	191974
Peak Shortage (MW)	130	0	0	0	24	154
Energy Met (MU)	1430	1222	1028	589	65	4335
Hydro Gen (MU)	434	70	75	135	36	750
Wind Gen (MU)	51	246	243	-	-	541
Solar Gen (MU)*	103.08	43.00	112.32	4.68	0.85	264
Energy Shortage (MU)	0.26	0.00	0.00	0.14	0.48	0.88
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	66447	55056	48622	29049	3504	192758
Time Of Maximum Demand Met	22:37	19:47	10:40	00:01	19:39	20:58

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	0.076	0.00	0.14	2.79	2.93	75.63	21.44

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	12873	0	273.7	170.9	-2.0	263	0.00
	Haryana	9478	0	199.1	151.5	-2.2	112	0.00
	Rajasthan	10369	0	234.2	49.0	-6.0	361	0.00
	Delhi	5263	0	112.7	103.2	-1.7	100	0.00
	UP	24477	0	469.8	244.0	-2.3	1160	0.00
	Uttarakhand	2111	0	46.0	22.1	0.3	173	0.00
	HP	1750	18	35.6	2.1	0.0	160	0.05
	J&K(UT) & Ladakh(UT)	2422	130	49.4	28.0	-2.5	146	0.21
	Chandigarh	302	0	6.3	6.5	-0.2	15	0.00
Railways_NR ISTS	158	0	3.2	3.5	-0.4	0	0.00	
WR	Chhattisgarh	4615	0	104.2	54.8	-2.5	211	0.00
	Gujarat	15149	0	344.2	154.7	0.0	645	0.00
	MP	10955	0	242.2	117.8	-3.5	441	0.00
	Maharashtra	20963	0	457.5	169.3	-3.9	1073	0.00
	Goa	630	0	12.4	12.3	-0.2	36	0.00
	DNHDDPDCL	1287	0	30.1	29.9	0.2	140	0.00
	AMNSIL	867	0	19.0	9.2	0.2	296	0.00
	BALCO	523	0	12.5	12.4	0.1	37	0.00
SR	Andhra Pradesh	8891	0	194.7	34.4	-1.3	491	0.00
	Telangana	9626	0	197.4	88.1	1.9	748	0.00
	Karnataka	9568	0	173.6	26.6	1.1	1016	0.00
	Kerala	3795	0	75.6	57.0	1.0	300	0.00
	Tamil Nadu	17455	0	376.3	159.5	-0.8	557	0.00
	Puducherry	462	0	10.7	10.4	-0.5	43	0.00
ER	Bihar	7326	0	134.1	133.8	-7.8	383	0.14
	DVC	3483	0	71.7	-25.0	-0.5	244	0.00
	Jharkhand	1651	0	33.8	30.3	-1.3	121	0.00
	Odisha	6616	0	124.2	49.9	-0.5	417	0.00
	West Bengal	10131	0	224.3	97.9	-0.9	340	0.00
	Sikkim	73	0	1.1	1.0	0.1	21	0.00
	Railways_ER ISTS	15	0	0.1	0.1	0.0	0	0.00
NER	Arunachal Pradesh	163	0	2.7	2.6	-0.3	20	0.00
	Assam	2345	0	43.2	36.2	-0.2	131	0.00
	Manipur	196	0	2.8	2.9	-0.1	22	0.00
	Meghalaya	320	8	5.6	1.7	-0.1	131	0.48
	Mizoram	117	0	2.0	1.6	-0.1	20	0.00
	Nagaland	163	0	3.1	2.7	-0.1	18	0.00
	Tripura	334	0	6.0	5.6	0.0	59	0.00

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	44.5	8.6	-25.2	-18.1
Day Peak (MW)	1898.0	393.0	-1076.0	-790.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	268.1	-246.4	19.9	-35.3	-6.2	0.0
Actual(MU)	227.1	-253.1	39.0	-15.4	-4.9	-7.3
O/D/U/D(MU)	-41.0	-6.7	19.1	20.0	1.3	-7.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	5959	11346	5838	3545	271	26959	42
State Sector	7675	16783	9563	2928	171	37120	58
Total	13634	28129	15401	6473	442	64328	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	621	1135	481	533	10	2780	60
Lignite	23	5	51	0	0	79	2
Hydro	434	70	75	135	36	750	16
Nuclear	29	50	63	0	0	143	3
Gas, Naptha & Diesel	13	11	6	0	29	59	1
RES (Wind, Solar, Biomass & Others)	161	292	379	6	1	839	18
Total	1281	1563	1055	675	77	4650	100

Share of RES in total generation (%)	12.57	18.69	35.91	0.95	1.11	18.05
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	48.72	26.37	49.05	20.99	48.15	37.25

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.051
Based on State Max Demands	1.073

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	191209	10:22	24
Non-Solar hr	192758	20:58	154

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: 30-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	501	0.0	12.6	-12.6
2	HVDC	PUSAULI B/B	-	0	108	0.0	2.5	-2.5
3	765 kV	GAYA-VARANASI	2	651	492	5.4	0.0	5.4
4	765 kV	SASARAM-FATEHPUR	1	230	288	0.5	0.0	0.5
5	765 kV	GAYA-BALIA	1	40	523	0.0	4.7	-4.7
6	400 kV	PUSAULI-VARANASI	1	0	142	0.0	1.9	-1.9
7	400 kV	PUSAULI -ALLAHABAD	1	27	80	0.0	0.8	-0.8
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	859	0.0	11.8	-11.8
9	400 kV	PATNA-BALIA	2	56	273	0.0	2.0	-2.0
10	400 kV	NAUBATPUR-BALIA	2	122	293	0.0	1.1	-1.1
11	400 kV	BIHARSHARIFF-BALIA	2	182	147	0.1	0.0	0.1
12	400 kV	MOTTHARI-GORAKHPUR	2	0	515	0.0	6.3	-6.3
13	400 kV	BIHARSHARIFF-VARANASI	2	242	242	1.3	0.0	1.3
14	220 kV	SAHUPURI-KARAMNANA	1	14	126	0.0	1.0	-1.0
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	30	0	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	64	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
ER-NR						7.6	44.6	-37.0
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1786	0	29.6	0.0	29.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1627	0	27.1	0.0	27.1
3	765 kV	JHARSUGUDA-DURG	2	242	119	8.0	0.0	8.0
4	400 kV	JHARSUGUDA-RAIGARH	4	127	381	0.0	2.6	-2.6
5	400 kV	RANCHI-SIPAT	2	396	0	5.7	0.0	5.7
6	220 kV	BUDHIPADAR-RAIGARH	1	0	71	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	99	0	0.3	0.0	0.3
ER-WR						70.7	4.0	66.7
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	592	0	10.7	0.0	10.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1984	0.0	38.8	-38.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	3177	0.0	43.0	-43.0
4	400 kV	TALCHER-I/C	2	486	982	0.0	7.7	-7.7
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						10.7	81.7	-71.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	73	277	0.2	1.9	-1.7
2	400 kV	ALIPURDUAR-BONGAIGAON	2	112	399	0.0	2.8	-2.8
3	220 kV	ALIPURDUAR-SALAKATI	2	0	105	0.0	1.2	-1.2
ER-NER						0.2	5.8	-5.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
NER-NR						0.0	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2528	0.0	51.5	-51.5
2	HVDC	VINDHYACHAL B/B	-	0	295	0.0	7.2	-7.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	298	0.0	7.4	-7.4
4	765 kV	GWALIOR-AGRA	2	0	2666	0.0	33.0	-33.0
5	765 kV	GWALIOR-PHAGI	2	774	1579	3.2	11.0	-7.8
6	765 kV	JABALPUR-ORAI	2	0	1060	0.0	24.6	-24.6
7	765 kV	GWALIOR-ORAI	1	967	0	12.5	0.0	12.5
8	765 kV	SATNA-ORAI	1	0	914	0.0	14.7	-14.7
9	765 kV	BANASKANTHA-CHITORGARH	2	149	1275	0.1	13.6	-13.5
10	765 kV	VINDHYACHAL-VARANASI	2	0	3374	0.0	55.0	-55.0
11	400 kV	ZERDA-KANKROLI	1	140	178	0.7	1.1	-0.4
12	400 kV	ZERDA -BHINMAL	1	421	229	3.7	0.8	3.0
13	400 kV	VINDHYACHAL -RIHAND	1	959	0	18.1	0.0	18.1
14	400 kV	RAPP-SHUJALPUR	2	319	659	2.0	3.4	-1.4
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.1	-2.1
17	220 kV	MEHGAON-AURAIYA	1	0	0	0.0	0.0	0.0
18	220 kV	MALANPUR-AURAIYA	1	0	0	0.0	0.0	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						40.3	225.4	-185.1
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	994	0	19.2	0.0	19.2
2	HVDC	RAIGARH-PUGALUR	2	0	2006	0.0	20.1	-20.1
3	765 kV	SOLAPUR-RAICHUR	2	1578	1846	9.6	5.2	4.4
4	765 kV	WARDHA-NIZAMABAD	2	0	3127	0.0	32.5	-32.5
5	400 kV	KOLHAPUR-KUDGI	2	1604	0	25.6	0.0	25.6
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	125	2.3	0.0	2.3
WR-SR						56.7	57.8	-1.1

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)	609	567	603	14.48
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1060	993	1010	24.23
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	192	125	163	3.92
	NER	132kV GELEPHU-SALAKATI	26	18	23	0.55
	NER	132kV MOTANGA-RANGIA	66	40	55	1.31
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-44	0	4	0.10
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	437	197	352	8.45
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-934	-932	-933	-22.38
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-790	-708	-754	-18.09
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-142	0	-119	-2.86