



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: 28th 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 27.07.2023.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 27-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 27th July 2023, is available at the NLDC website.

धन्यवाद,

Report for previous day

Date of Reporting: 28-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)	70749	55095	42298	27968	3358	199468
Peak Shortage (MW)	300	0	0	114	29	443
Energy Met (MU)	1561	1287	911	633	67	4459
Hydro Gen (MU)	416	71	89	141	32	748
Wind Gen (MU)	9	184	255	-	-	449
Solar Gen (MU)*	65.67	38.15	75.76	1.87	0.97	182
Energy Shortage (MU)	1.71	0.00	0.00	0.79	0.55	3.05
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	71557	57570	44042	29492	3364	202085
Time Of Maximum Demand Met	22:24	09:51	19:22	23:12	19:25	19:44

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	0.025	0.00	0.00	1.83	1.83	77.61	20.56

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	12876	0	283.7	167.4	-1.9	135	0.00
	Haryana	10160	0	216.2	166.1	-2.5	89	0.00
	Rajasthan	11500	0	260.2	101.3	-2.2	337	0.00
	Delhi	6180	0	128.4	115.2	-2.2	157	0.00
	UP	26690	0	532.9	274.5	-1.1	256	0.00
	Uttarakhand	2151	0	47.3	22.7	-0.1	136	0.04
	HP	1711	0	34.9	0.2	-0.2	93	0.23
	J&K(UT) & Ladakh(UT)	2384	0	47.9	27.3	-1.6	74	1.44
	Chandigarh	330	0	6.7	7.0	-0.3	15	0.00
Railways NR ISTS	156	0	3.3	3.5	-0.2	10	0.00	
WR	Chhattisgarh	5207	0	115.5	64.1	-1.7	390	0.00
	Gujarat	16370	0	367.6	154.5	-4.4	784	0.00
	MP	11945	0	264.3	142.5	-2.4	368	0.00
	Maharashtra	21779	0	466.1	168.7	-6.0	608	0.00
	Goa	608	0	11.8	12.2	-0.7	66	0.00
	DNHDDPDCL	1307	0	30.3	30.2	0.1	93	0.00
	AMNSIL	837	0	19.3	11.4	0.5	280	0.00
	BALCO	523	0	12.4	12.4	0.0	72	0.00
SR	Andhra Pradesh	8261	0	171.2	23.1	-2.4	1114	0.00
	Telangana	6830	0	142.9	42.7	-1.8	558	0.00
	Karnataka	8577	0	166.3	17.4	-3.0	508	0.00
	Kerala	3593	0	71.3	46.7	1.4	280	0.00
	Tamil Nadu	16548	0	349.5	141.4	-1.5	837	0.00
	Puducherry	463	0	9.9	9.7	-0.3	49	0.00
ER	Bihar	7578	0	160.4	150.9	-1.0	318	0.01
	DVC	3498	0	76.9	-30.1	-1.1	201	0.00
	Jharkhand	1748	114	39.7	33.3	1.5	173	0.78
	Odisha	6744	0	134.4	45.7	-2.0	407	0.00
	West Bengal	9916	0	219.8	99.2	-1.7	268	0.00
	Sikkim	80	0	1.3	1.3	0.0	26	0.00
NER	Railways ER ISTS	12	0	0.1	0.2	-0.1	2	0.00
	Arunachal Pradesh	146	0	2.6	2.4	0.0	41	0.00
	Assam	2257	0	45.4	37.4	0.5	113	0.00
	Manipur	196	0	2.6	2.7	-0.1	14	0.00
	Meghalaya	305	0	5.4	1.2	-0.1	57	0.55
	Mizoram	116	0	1.9	1.5	-0.1	18	0.00
	Nagaland	167	0	2.9	2.7	-0.1	12	0.00
Tripura	321	0	6.2	5.6	0.2	52	0.00	

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

	Bhutan	Nepal	Bangladesh	Godda -> Bangladesh
Actual (MU)	43.4	7.0	-24.8	-18.1
Day Peak (MW)	1974.7	286.0	-1051.0	-783.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	351.0	-230.4	-67.7	-50.6	-2.4	0.0
Actual(MU)	337.9	-234.3	-72.0	-37.9	0.2	-6.2
O/D/U/D(MU)	-13.2	-3.9	-4.4	12.7	2.5	-6.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2750	11055	6138	3020	271	23234	41
State Sector	5910	15593	9503	2080	171	33257	59
Total	8659	26648	15641	5100	442	56490	100

G. Sourcewise generation (Gross) (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	723	1268	473	599	12	3074	64
Lignite	27	7	52	0	0	87	2
Hydro	416	71	89	141	32	748	16
Nuclear	29	52	64	0	0	145	3
Gas, Naptha & Diesel	34	19	6	0	29	88	2
RES (Wind, Solar, Biomass & Others)	81	224	363	3	1	672	14
Total	1310	1641	1047	743	73	4814	100

Share of RES in total generation (%)	6.20	13.62	34.72	0.42	1.33	13.96
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	40.17	21.12	49.26	19.42	44.44	32.51

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.019
Based on State Max Demands	1.039

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

	Max Demand Met(MW)	Time	Shortage(MW)
Solar hr	194445	14:58	0
Non-Solar hr	202085	19:44	539

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: 28-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	11.8	-11.8
2	HVDC	PUSAULI B/B	-	0	107	0.0	2.7	-2.7
3	765 kV	GAYA-VARANASI	2	450	407	0.8	0.0	0.8
4	765 kV	SASARAM-FATEHPUR	1	134	204	0.0	1.0	-1.0
5	765 kV	GAYA-BALIA	1	0	650	0.0	9.3	-9.3
6	400 kV	PUSAULI-VARANASI	1	0	109	0.0	1.9	-1.9
7	400 kV	PUSAULI-ALLAHABAD	1	0	80	0.0	0.7	-0.7
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	735	0.0	12.1	-12.1
9	400 kV	PATNA-BALIA	2	0	398	0.0	6.1	-6.1
10	400 kV	NAUBATPUR-BALIA	2	0	387	0.0	5.4	-5.4
11	400 kV	BIHARSHARIFF-BALIA	2	121	193	0.0	1.8	-1.8
12	400 kV	MOTIHARI-GORAKHPUR	2	0	511	0.0	8.2	-8.2
13	400 kV	BIHARSHARIFF-VARANASI	2	208	151	0.0	0.1	-0.1
14	220 kV	SAHUPURI-KARAMNANA	1	18	111	0.0	1.3	-1.3
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.8	0.0	0.8
16	132 kV	GARWAH-RIHAND	1	30	0	0.8	0.0	0.8
17	132 kV	KARMANASA-SAHUPURI	1	0	59	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						2.4	62.3	-59.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1186	282	11.5	0.0	11.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1727	73	28.7	0.0	28.7
3	765 kV	JHARSUGUDA-DURG	2	194	267	0.0	0.1	-0.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	498	0.0	5.9	-5.9
5	400 kV	RANCHI-SIPAT	2	433	117	5.4	0.0	5.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	44	0.0	3.2	-3.2
7	220 kV	BUDHIPADAR-KORBA	2	86	0	0.3	0.0	0.3
ER-WR						45.8	9.2	36.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	688	0	9.6	0.0	9.6
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1633	0.0	27.6	-27.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	2347	0.0	30.0	-30.0
4	400 kV	TALCHER-I/C	2	1099	219	15.3	0.0	15.3
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
ER-SR						9.6	57.6	-48.0
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	1	247	0.0	3.6	-3.6
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	370	0.0	5.3	-5.3
3	220 kV	ALIPURDUAR-SALAKATI	2	0	97	0.0	1.5	-1.5
ER-NER						0.0	10.4	-10.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.0	-12.0
NER-NR						0.0	12.0	-12.0
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4531	0.0	68.6	-68.6
2	HVDC	VINDHYACHAL B/B	-	0	487	0.0	12.0	-12.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	977	0.0	24.2	-24.2
4	765 kV	GWALIOR-AGRA	2	0	2510	0.0	35.2	-35.2
5	765 kV	GWALIOR-PHAGI	2	0	1403	0.0	24.6	-24.6
6	765 kV	JABALPUR-ORAI	2	0	1234	0.0	37.1	-37.1
7	765 kV	GWALIOR-ORAI	1	651	0	12.0	0.0	12.0
8	765 kV	SATNA-ORAI	1	0	1033	0.0	19.9	-19.9
9	765 kV	BANASKANTHA-CHITORGARH	2	522	1432	0.0	11.6	-11.6
10	765 kV	VINDHYACHAL-VARANASI	2	0	3355	0.0	60.1	-60.1
11	400 kV	ZERDA-KANKROLI	1	118	242	0.0	1.7	-1.7
12	400 kV	ZERDA-BHINMAL	1	191	364	0.0	1.7	-1.7
13	400 kV	VINDHYACHAL-RIHAND	1	954	0	22.6	0.0	22.6
14	400 kV	RAPP-SHUALPUR	2	0	598	0.0	7.2	-7.2
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	2.3	-2.3
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						34.6	306.2	-271.7
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	995	0	24.0	0.0	24.0
2	HVDC	RAIGARH-PUGALUR	2	480	305	5.5	3.1	2.4
3	765 kV	SOLAPUR-RAICHUR	2	2474	788	24.8	0.0	24.8
4	765 kV	WARDHA-NIZAMABAD	2	820	1807	0.0	8.1	-8.1
5	400 kV	KOLHAPUR-KUDGI	2	1611	0	30.0	0.0	30.0
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	1	100	1.2	0.0	1.2
WR-SR						85.4	11.2	74.3

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)	635	0	563	13.51	
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP 6*170MW)	1015	978	1000	23.99	
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	201	143	170	4.08	
	NER	132kV GELEPHU-SALAKATI	26	5	23	0.55	
	NER	132kV MOTANGA-RANGIA	65	23	52	1.26	
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-45	0	-8	-0.19	
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00	
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	331	207	299	7.17	
BANGLADESH	ER	BHERAMARA B/B HVDC (B'DESH)	-916	-803	-913	-21.90	
	ER (Isolated from Indian Grid)	400kV GODDA_TPS-RAHANPUR (B'DESH) D/C	-783	-725	-754	-18.09	
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-135	0	-122	-2.92	