



**National Load Despatch Centre**  
**राष्ट्रीय भार प्रेषण केंद्र**  
**POWER SYSTEM OPERATION CORPORATION LIMITED**  
**पावर सिस्टम ऑपरेशन कारपोरेशन 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<sup>th</sup> July 2022

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 21.07.2022.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-जुलाई-2022 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<sup>st</sup> July 2022, is available at the NLDC website.

धन्यवाद,

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड  
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



Report for previous day

Date of Reporting: 22-Jul-2022

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)	57514	51266	41960	26140	3168	180048
Peak Shortage (MW)	35	0	0	589	0	624
Energy Met (MU)	1272	1149	992	562	61	4036
Hydro Gen (MU)	338	106	131	129	36	740
Wind Gen (MU)	71	159	106	-	-	336
Solar Gen (MU)*	86.09	37.75	91.90	4.04	0.48	220
Energy Shortage (MU)	3.84	0.00	0.00	3.36	0.00	7.20
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62415	51325	46435	26499	3209	181146
Time Of Maximum Demand Met (From NLDC SCADA)	22:24	19:39	10:00	20:40	19:17	20:00

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	0.032	0.00	0.02	3.47	3.49	69.19	27.31

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	10601	0	183.5	140.1	-16.5	93	0.00
	Haryana	8299	0	171.8	111.7	-1.4	235	0.00
	Rajasthan	10832	0	239.2	19.9	-1.3	458	0.00
	Delhi	5821	0	118.7	108.2	-1.4	108	0.00
	UP	23312	0	428.1	187.0	1.9	618	3.49
	Uttarakhand	2117	35	45.6	24.7	0.0	121	0.35
	HP	1610	0	33.4	-5.3	0.3	109	0.00
	J&K(UT) & Ladakh(UT)	1911	0	45.1	25.7	-5.8	161	0.00
	Chandigarh	271	0	6.1	6.6	-0.5	8	0.00
	WR	Chhattisgarh	4286	0	97.5	50.3	-3.8	215
Gujarat		15297	0	334.0	163.1	-1.9	561	0.00
MP		9846	0	211.4	70.1	-0.1	714	0.00
Maharashtra		20546	0	449.4	165.6	2.1	923	0.00
Goa		592	0	12.1	12.5	-0.4	47	0.00
DNHDDPDCL		1132	0	26.5	26.4	0.1	0	0.00
AMNSIL		845	0	17.7	11.1	0.0	304	0.00
SR	Andhra Pradesh	9288	0	198.5	84.3	-0.3	547	0.00
	Telangana	10627	0	196.0	87.3	0.0	456	0.00
	Karnataka	9274	0	182.1	52.8	-0.3	917	0.00
	Kerala	3513	0	71.0	38.2	-0.1	243	0.00
	Tamil Nadu	15236	0	335.0	157.2	-0.3	459	0.00
	Puducherry	440	0	9.9	9.5	-0.3	52	0.00
ER	Bihar	6441	81	120.1	111.7	0.3	428	1.72
	DVC	3526	0	76.6	-32.7	-0.1	390	0.00
	Jharkhand	1672	439	32.9	25.7	-1.6	274	1.64
	Odisha	6037	0	131.4	68.2	0.8	319	0.00
	West Bengal	9520	0	199.4	78.2	0.7	587	0.00
NER	Sikkim	98	0	1.6	1.5	0.1	24	0.00
	Arunachal Pradesh	138	0	2.6	2.6	-0.3	45	0.00
	Assam	2113	0	40.2	32.7	0.1	106	0.00
	Manipur	188	0	2.5	2.7	-0.2	20	0.00
	Meghalaya	356	0	5.8	0.3	-0.2	69	0.00
	Mizoram	99	0	1.6	0.8	0.5	10	0.00
	Nagaland	143	0	2.7	2.3	-0.1	10	0.00
	Tripura	330	0	5.7	6.2	0.3	70	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	38.3	8.2	-23.9
Day Peak (MW)	1859.0	357.0	-1044.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	160.8	-166.6	66.2	-47.7	-12.7	0.0
Actual(MU)	115.3	-158.7	84.2	-34.8	-11.9	-5.9
O/D/U/D(MU)	-45.5	8.0	18.0	12.8	0.8	-5.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	3575	18011	5888	2820	309	30602	42
State Sector	8225	18709	11117	3250	150	41450	58
Total	11800	36719	17005	6070	459	72052	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	656	971	437	498	14	2576	61
Lignite	24	10	61	0	0	95	2
Hydro	340	106	131	129	36	742	18
Nuclear	29	40	68	0	0	137	3
Gas, Naptha & Diesel	16	3	9	0	28	57	1
RES (Wind, Solar, Biomass & Others)	174	197	241	4	0	617	15
Total	1239	1328	947	631	78	4224	100

Share of RES in total generation (%)	14.08	14.87	25.45	0.64	0.61	14.62
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	43.91	25.90	46.39	21.07	46.45	35.43

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.048
Based on State Max Demands	1.084

Diversity factor = Sum of regional or state maximum demands / All India maximum demand

\*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-2022

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)	
<b>Import/Export of ER (With NR)</b>									
1	HVDC	ALIPURDUAR-AGRA	2	0	501	0.0	12.2	-12.2	
2	HVDC	PUSAULI B/B	2	0	49	0.0	1.3	-1.3	
3	765 kV	GAYALYARANASI	2	1040	6	10.8	0.0	10.8	
4	765 kV	SASARAM-FATEHPUR	1	313	89	1.8	0.0	1.8	
5	765 kV	GAYA-BALIA	1	22	572	0.0	6.0	-6.0	
6	400 kV	PUSAULI-VARANASI	1	0	99	0.0	1.3	-1.3	
7	400 kV	PUSAULI-ALLAHABAD	1	44	45	0.2	0.0	0.2	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	50	779	0.0	9.3	-9.3	
9	400 kV	PATNA-BALIA	2	0	591	0.0	8.0	-8.0	
10	400 kV	NAUBATPUR-BALIA	2	0	576	0.0	7.4	-7.4	
11	400 kV	BIHARSHARIFF-BALIA	2	156	363	0.0	3.7	-3.7	
12	400 kV	MOTIHARI-GORAKHPUR	2	77	421	0.0	5.1	-5.1	
13	400 kV	BIHARSHARIFF-VARANASI	2	382	73	3.3	0.0	3.3	
14	220 kV	SAHUPUR-KARMANASA	1	39	109	0.0	0.8	-0.8	
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0	
16	132 kV	GARWAH-RIHAND	1	25	0	0.0	0.3	-0.3	
17	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.8	-0.8	
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0	
						ER-NR	16.3	55.8	-39.5
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	629	0	29.4	0.0	29.4	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1197	668	15.6	0.0	15.6	
3	765 kV	JHARSUGUDA-DURG	2	0	314	0.5	0.0	0.5	
4	400 kV	JHARSUGUDA-RAIGARH	4	0	312	1.7	0.0	1.7	
5	400 kV	RANCHI-SIPAT	2	306	180	3.1	0.0	3.1	
6	220 kV	BUDHIPADAR-RAIGARH	1	75	68	0.0	0.3	-0.3	
7	220 kV	BUDHIPADAR-KORBA	2	190	0	2.1	0.0	2.1	
						ER-WR	52.5	0.3	52.2
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	587	0	14.5	0.0	14.5	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	2476	0.0	48.1	-48.1	
3	765 kV	ANGUL-SRIKAKULAM	2	0	3280	0.0	50.8	-50.8	
4	400 kV	TALCHER-T/C	2	257	1004	0.0	7.4	-7.4	
5	220 kV	BALMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0	
						ER-SR	14.5	98.8	-84.3
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	2	124	237	0.0	1.5	-1.5	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	193	335	0.0	1.7	-1.7	
3	220 kV	ALIPURDUAR-SALAKATI	2	10	108	0.0	1.1	-1.1	
						ER-NER	0.0	4.3	-4.3
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	704	0.0	17.1	-17.1	
						NER-NR	0.0	17.1	-17.1
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1019	0.0	24.1	-24.1	
2	HVDC	VINDHYACHAL B/B	2	442	0	12.1	0.0	12.1	
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1015	0.0	23.0	-23.0	
4	765 kV	GWALIOR-AGRA	2	1022	1805	2.1	16.3	-14.2	
5	765 kV	GWALIOR-PHAGI	2	1642	1001	10.4	6.4	4.0	
6	765 kV	JABALPUR-ORAI	2	417	608	0.0	6.6	-6.6	
7	765 kV	GWALIOR-ORAI	1	650	35	7.5	0.0	7.5	
8	765 kV	SATNA-ORAI	1	0	830	0.0	13.9	-13.9	
9	765 kV	BANASKANTHA-CHITORGARH	2	1223	87	9.6	0.0	9.6	
10	765 kV	VINDHYACHAL-VARANASI	2	0	3020	0.0	55.0	-55.0	
11	400 kV	ZERDA-KANKROLI	1	367	0	4.3	0.0	4.3	
12	400 kV	ZERDA-BHINMAL	1	662	0	10.7	0.0	10.7	
13	400 kV	VINDHYACHAL-RIHAND	1	969	0	19.7	0.0	19.7	
14	400 kV	RAPP-SHULIAPUR	2	702	358	6.9	1.5	5.4	
15	220 kV	BHANUPUR-RANPUR	1	0	1	0.0	0.0	0.0	
16	220 kV	BHANUPUR-MORAK	1	0	30	0.0	2.2	-2.2	
17	220 kV	MEHGAON-AURAIYA	1	117	0	0.7	0.0	0.7	
18	220 kV	MALANPUR-AURAIYA	1	90	11	1.3	0.0	1.3	
19	132 kV	GWALIOR-SAWAIMADHOPUR	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	85.4	149.0	-63.6
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	784	0	7.8	0.0	7.8	
2	HVDC	RAIGARH-PUGALUR	2	2395	2499	0.0	22.2	-22.2	
3	765 kV	SOLAPUR-RAICHUR	2	348	2209	0.7	12.4	-11.7	
4	765 kV	WARDHA-NIZAMABAD	2	0	3376	0.0	45.9	-45.9	
5	400 kV	KOLHAPUR-KUDCI	2	1513	0	27.5	0.0	27.5	
6	220 kV	KOLHAPUR-CHIKODI	1	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	101	1.9	0.0	1.9	
						WR-SR	37.9	80.5	-42.6
<b>INTERNATIONAL EXCHANGES</b>									
State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Import(+ve)/Export(-ve) Energy Exchange (MU)			
BHUTAN	ER	400KV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHHU HEP 4*180MW)	583	0	554	13.3			
	ER	400KV TALA-BINAGURI 1,2,4 (& 400KV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	1020	0	901	21.6			
	ER	220KV CHUKHA-BIRPARA 1&2 (& 220KV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	246	0	180	4.3			
	NER	132KV GELEPHU-SALAKATI	15	0	8	0.2			
	NER	132KV MOTANGA-RANGIA	46	7	31	0.7			
NEPAL	NR	132KV MAHENDRANAGAR-TANAKPUR(NHPC)	-69	0	-28	-0.7			
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.0			
BANGLADESH	ER	400KV DHALKEBAR-MUZAFFARPUR 1&2	426	202	371	8.9			
	NER	BHERAMARA B/B HVDC (BANGLADESH)	-921	-875	-898	-21.6			
	NER	132KV COMILLA-SURAJMANNAGAR 1&2	-123	0	-98	-2.3			