



**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>nd</sup> Jul 2020

To,

1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के., 14, गोल्फ क्लब रोड, कोलकाता - 700033  
Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, Kolkata, 700033
2. 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
3. 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
4. कार्यकारी निदेशक, ऊ.पू.क्षे.भा.प्रे.के., डोंगतिह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006  
Executive Director, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
5. 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 21.07.2020.**

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.5.5.1 के प्रावधान के अनुसार, दिनांक 21-जुलाई-2020 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>th</sup> July 2020, 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-2020

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	47566	43935	36528	20154	2575	150758
Peak Shortage (MW)	662	0	0	0	152	814
Energy Met (MU)	1090	1047	836	435	46	3454
Hydro Gen (MU)	344	23	111	137	30	645
Wind Gen (MU)	54	74	26	-	-	154
Solar Gen (MU)*	24.70	21.60	79.16	4.17	0.02	130
Energy Shortage (MU)	9.3	0.0	0.0	0.0	4.0	13.3
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52090	45439	38819	20541	2634	150357
Time Of Maximum Demand Met (From NLDC SCADA)	00:00	10:11	12:27	00:00	19:14	11:50

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	0.62	4.95	5.58	81.18	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	7396	0	160.9	113.2	-2.2	65	0.0
	Haryana	6408	0	132.7	105.3	-4.8	158	0.0
	Rajasthan	11453	0	244.6	78.1	-2.4	225	0.0
	Delhi	4485	0	88.6	78.1	-2.0	144	0.1
	UP	18895	0	356.7	173.4	-2.3	438	0.4
	Uttarakhand	1689	0	36.8	16.9	-0.7	172	0.0
	HP	1343	0	27.4	-3.7	-1.9	118	0.0
	J&K(UT) & Ladakh(UT)	2101	525	36.8	13.7	0.1	364	8.8
WR	Chandigarh	240	0	5.1	5.8	-0.7	0	0.0
	Chhattisgarh	4066	0	98.3	37.6	-0.4	199	0.0
	Gujarat	14193	0	307.4	98.7	5.2	605	0.0
	MP	9315	0	208.4	110.2	-1.7	336	0.0
	Maharashtra	17485	0	386.1	159.2	0.4	677	0.0
	Goa	417	0	8.9	8.4	0.0	40	0.0
	DD	248	0	5.4	5.2	0.2	26	0.0
	DNH	631	0	14.4	14.3	0.1	34	0.0
SR	AMNSIL	806	0	17.6	5.3	0.0	250	0.0
	Andhra Pradesh	7286	0	153.0	63.5	0.7	793	0.0
	Telangana	9317	0	187.6	84.1	0.2	774	0.0
	Karnataka	7336	0	146.2	60.1	0.2	443	0.0
	Kerala	3113	0	64.1	45.9	0.7	187	0.0
	Tamil Nadu	12846	0	277.6	118.8	1.5	790	0.0
	Puducherry	362	0	7.8	7.9	-0.1	37	0.0
	ER	Bihar	4995	0	96.7	93.2	-2.3	660
DVC		2804	0	63.3	-27.1	0.1	287	0.0
Jharkhand		1245	0	25.5	18.8	-1.6	159	0.0
Odisha		4436	0	96.0	14.4	0.0	365	0.0
West Bengal		7419	0	152.8	47.2	0.7	446	0.0
NER	Sikkim	80	0	1.1	1.3	-0.2	18	0.0
	Arunachal Pradesh	88	1	1.7	1.6	0.2	14	0.0
	Assam	1705	30	28.4	25.2	0.4	120	4.0
	Manipur	184	1	2.7	2.5	0.2	23	0.0
	Meghalaya	306	0	5.2	-0.4	0.1	30	0.0
	Mizoram	99	1	1.7	1.2	0.2	20	0.0
	Nagaland	123	2	2.4	2.3	-0.1	7	0.0
Tripura	230	2	3.7	5.4	-1.0	45	0.0	

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	54.0	-1.3	-25.2
Day Peak (MW)	2314.0	-171.1	-1081.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	204.3	-214.9	112.0	-96.7	-4.6	0.0
Actual(MU)	154.9	-216.0	148.6	-92.2	-5.5	-10.1
O/D/U/D(MU)	-49.4	-1.1	36.7	4.5	-0.9	-10.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	4639	16547	11612	2150	893	35841
State Sector	11169	20633	13765	5742	47	51356
Total	15808	37180	25377	7892	940	87197

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	455	1027	363	408	3	2255
Lignite	17	15	26	0	0	59
Hydro	344	23	111	137	30	645
Nuclear	27	33	33	0	0	92
Gas, Naptha & Diesel	21	49	17	0	23	109
RES (Wind, Solar, Biomass & Others)	100	118	150	4	0	371
Total	963	1264	699	549	56	3532

Share of RES in total generation (%)	10.35	9.33	21.38	0.77	0.04	10.52
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	48.86	13.76	41.99	25.68	53.65	31.41

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.061
Based on State Max Demands	1.098

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-2020

Sl No	Voltage Level	Line Details	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	D/C	0	1204	0.0	29.1	-29.1	
2	HVDC	PUSAULI B/B	-	0	398	0.0	9.6	-9.6	
3	765 kV	GAYA-VARANASI	D/C	158	419	0.0	2.1	-2.1	
4	765 kV	SASARAM-FATEHPUR	S/C	279	177	3.0	0.0	3.0	
5	765 kV	GAYA-BALIA	S/C	0	337	0.0	4.7	-4.7	
6	400 kV	PUSAULI-VARANASI	S/C	0	312	0.0	6.8	-6.8	
7	400 kV	PUSAULI-ALLAHABAD	S/C	0	163	0.0	2.9	-2.9	
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	624	0.0	9.8	-9.8	
9	400 kV	PATNA-BALIA	Q/C	0	720	0.0	9.6	-9.6	
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	272	0.0	3.9	-3.9	
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	285	0.0	4.0	-4.0	
12	400 kV	BIHARSHARIFF-VARANASI	D/C	119	107	0.3	0.0	0.3	
13	220 kV	PUSAULI-SAHUPURI	S/C	0	103	0.0	2.0	-2.0	
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4	
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0	
17	132 kV	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0	
						<b>ER-NR</b>	<b>3.7</b>	<b>84.5</b>	<b>-80.8</b>
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1859	0	34.1	0.0	34.1	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	1009	0	13.3	0.0	13.3	
3	765 kV	JHARSUGUDA-DURG	D/C	210	34	1.9	0.0	1.9	
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	209	144	0.4	0.0	0.4	
5	400 kV	RANCHI-SIPAT	D/C	360	0	5.0	0.0	5.0	
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	124	0.0	1.8	-1.8	
7	220 kV	BUDHIPADAR-KORBA	D/C	151	0	1.9	0.0	1.9	
						<b>ER-WR</b>	<b>56.7</b>	<b>1.8</b>	<b>54.9</b>
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	368	0.0	8.5	-8.5	
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	1855	0.0	48.0	-48.0	
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2417	0.0	47.2	-47.2	
4	400 kV	TALCHER-I/C	D/C	0	1004	0.0	13.4	-13.4	
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0	0.0	0.0	0.0	
						<b>ER-SR</b>	<b>0.0</b>	<b>103.6</b>	<b>-103.6</b>
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	D/C	0	334	0.0	2.7	-2.7	
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	147	325	0.0	0.8	-0.8	
3	220 kV	ALIPURDUAR-SALAKATI	D/C	0	104	0.0	1.0	-1.0	
						<b>ER-NER</b>	<b>0.0</b>	<b>4.4</b>	<b>-4.4</b>
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIALI-AGRA	D/C	0	704	0.0	12.2	-12.2	
						<b>NER-NR</b>	<b>0.0</b>	<b>12.2</b>	<b>-12.2</b>
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	376	0.0	18.0	-18.0	
2	HVDC	VINDHYACHAL B/B	-	451	0	10.6	0.0	10.6	
3	HVDC	MUNDRA-MOHINDERGARH	D/C	0	786	0.0	16.6	-16.6	
4	765 kV	GWALIOR-AGRA	D/C	0	1787	0.0	24.8	-24.8	
5	765 kV	PHAGI-GWALIOR	D/C	0	951	0.0	12.2	-12.2	
6	765 kV	JABALPUR-ORAI	D/C	0	708	0.0	19.9	-19.9	
7	765 kV	GWALIOR-ORAI	S/C	371	0	6.3	0.0	6.3	
8	765 kV	SATNA-ORAI	S/C	0	1245	0.0	24.4	-24.4	
9	765 kV	CHITORGARH-BANASKANTHA	D/C	34	656	0.0	6.9	-6.9	
10	400 kV	ZERDA-KANKROLI	S/C	141	59	1.4	0.0	1.4	
11	400 kV	ZERDA-BHINMAL	S/C	374	108	4.7	0.0	4.7	
12	400 kV	VINDHYACHAL-RIHAND	S/C	974	0	22.4	0.0	22.4	
13	400 kV	RAPP-SHUJALPUR	D/C	264	215	0.8	0.0	0.8	
14	220 kV	BHANPURA-RANPUR	S/C	11	0	0.0	0.7	-0.7	
15	220 kV	BHANPURA-MORAK	S/C	0	87	0.0	1.1	-1.1	
16	220 kV	MEHGAON-AURAIYA	S/C	97	0	0.4	0.1	0.4	
17	220 kV	MALANPUR-AURAIYA	S/C	63	16	1.0	0.0	1.0	
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0	
19	132 kV	RAJGHAT-LALITPUR	D/C	0	0	0.0	0.0	0.0	
						<b>WR-NR</b>	<b>47.7</b>	<b>124.7</b>	<b>-77.0</b>
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	0	309	0.0	20.6	-20.6	
2	HVDC	RAIGARH-PUGALUR	D/C	0	0	0.0	0.0	0.0	
3	765 kV	SOLAPUR-RAICHUR	D/C	364	2006	0.2	25.8	-25.5	
4	765 kV	WARDHA-NIZAMABAD	D/C	0	2536	0.0	42.8	-42.8	
5	400 kV	KOLHAPUR-KUDGI	D/C	562	0	5.3	0.0	5.3	
6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0	
7	220 kV	PONDA-AMBEWADI	S/C	0	0	0.0	0.0	0.0	
8	220 kV	XELDEM-AMBEWADI	S/C	0	91	1.6	0.0	1.6	
						<b>WR-SR</b>	<b>7.1</b>	<b>89.2</b>	<b>-82.0</b>

**INTERNATIONAL EXCHANGES**

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	DAGACHU ( 2 * 63 )	0	0	0	0.0
	ER	CHUKA ( 4 * 84 ) BIRPARA RECEIPT	361	347	330	7.9
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	770	763	740	17.8
	ER	TALA ( 6 * 170 ) BINAGURI RECEIPT	1064	1063	1074	25.8
	NER	132KV-SALAKATI - GELEPHU	62	0	52	1.2
	NER	132KV-RANGIA - DEOTHANG	63	0	55	1.3
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	-60	0	-31	-0.8
	ER	132KV-BIHAR - NEPAL	-67	-67	-16	-0.4
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-44	-2	-5	-0.1
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-956	-938	-944	-22.7
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	63	0	-59	-1.4
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	62	0	-48	-1.2