



**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: 23<sup>rd</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 22.07.2020.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-जुलाई-2020 की अखिल भारतीय प्रणाली की दैनिक ग्रिड 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 22<sup>nd</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: 23-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)	50433	43962	37571	21598	2691	156255
Peak Shortage (MW)	462	0	0	0	123	585
Energy Met (MU)	1110	1059	885	432	48	3535
Hydro Gen (MU)	339	22	116	127	31	634
Wind Gen (MU)	23	48	18	-	-	89
Solar Gen (MU)*	31.87	22.90	73.42	4.58	0.02	133
Energy Shortage (MU)	10.4	0.0	0.0	0.0	3.8	14.2
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53305	46232	41541	21204	2672	156246
Time Of Maximum Demand Met (From NLDC SCADA)	22:24	11:07	12:41	20:32	19:59	20:48

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	0.018	0.00	0.00	1.44	1.44	87.83	10.74

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	8720	0	188.3	130.4	-0.7	108	0.0	
	Haryana	6465	0	134.2	101.9	-0.2	315	0.0	
	Rajasthan	10563	0	228.7	85.0	-0.6	552	0.0	
	Delhi	3866	0	84.8	75.8	0.0	352	0.0	
	UP	19371	0	362.2	157.8	-0.5	322	0.3	
	Uttarakhand	1760	0	37.8	17.0	-0.4	181	0.0	
	HP	1367	0	27.4	-4.4	-0.9	88	0.0	
	J&K(UT) & Ladakh(UT)	2042	510	42.1	18.5	0.5	221	10.1	
	Chandigarh	229	0	4.8	5.3	-0.5	22	0.0	
	WR	Chhattisgarh	3873	0	93.4	34.5	-0.6	208	0.0
Gujarat		14231	0	313.5	105.8	4.8	708	0.0	
MP		9544	0	217.9	114.8	-4.6	430	0.0	
Maharashtra		17782	0	389.2	162.2	-2.7	452	0.0	
Goa		411	0	8.7	8.4	-0.2	32	0.0	
DD		251	0	5.4	5.3	0.1	21	0.0	
DNH		587	0	13.8	13.8	0.0	74	0.0	
AMNSIL		791	0	17.5	6.4	0.5	233	0.0	
SR		Andhra Pradesh	7454	0	159.6	73.3	0.2	650	0.0
		Telangana	10205	0	200.7	92.4	1.3	774	0.0
	Karnataka	8077	0	158.7	60.7	1.6	724	0.0	
	Kerala	3185	0	66.7	46.2	0.8	219	0.0	
	Tamil Nadu	13589	0	291.8	145.2	-0.9	604	0.0	
	Puducherry	367	0	7.5	8.0	-0.5	25	0.0	
	ER	Bihar	5429	0	103.0	97.8	-0.6	569	0.0
DVC		2915	0	63.2	-31.2	0.0	268	0.0	
Jharkhand		1458	0	24.7	18.1	-1.6	208	0.0	
Odisha		4104	0	91.9	6.9	0.1	225	0.0	
West Bengal		7654	0	148.6	44.8	1.0	556	0.0	
Sikkim		85	0	1.0	1.1	-0.1	24	0.0	
NER	Arunachal Pradesh	94	1	1.7	1.3	0.5	35	0.0	
	Assam	1713	110	30.4	27.0	-0.2	130	3.8	
	Manipur	179	1	2.8	2.5	0.2	23	0.0	
	Meghalaya	297	0	5.3	-0.5	0.2	49	0.0	
	Mizoram	96	2	1.7	1.3	0.2	14	0.0	
	Nagaland	122	2	2.3	2.3	-0.2	6	0.0	
	Tripura	260	2	4.1	5.0	-0.6	58	0.0	

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	48.1	-2.3	-23.0
Day Peak (MW)	2129.0	-262.0	-1095.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	215.9	-218.1	117.6	-109.8	-5.6	0.0
Actual(MU)	194.1	-223.9	155.0	-118.1	-5.6	1.6
OD/UD(MU)	-21.8	-5.8	37.5	-8.3	-0.1	1.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5549	16547	10612	2150	643	35501
State Sector	10289	19926	14274	5992	47	50528
Total	15838	36473	24886	8142	690	86029

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	465	1073	427	452	4	2421
Lignite	18	13	27	0	0	59
Hydro	339	22	116	127	31	634
Nuclear	27	33	24	0	0	84
Gas, Naptha & Diesel	16	71	17	0	24	128
RES (Wind, Solar, Biomass & Others)	76	86	134	5	0	301
Total	941	1299	745	583	59	3626
Share of RES in total generation (%)	8.08	6.63	17.99	0.79	0.03	8.29
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	46.92	10.84	36.81	22.51	52.20	28.09

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.033
Based on State Max Demands	1.021

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: 23-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	1202	0.0	27.2	-27.2	
2	HVDC	PUSAULI B/B	-	0	399	0.0	9.7	-9.7	
3	765 kV	GAYA-VARANASI	D/C	0	509	0.0	5.7	-5.7	
4	765 kV	SASARAM-FATEHPUR	S/C	177	177	1.4	0.0	1.4	
5	765 kV	GAYA-BALIA	S/C	0	432	0.0	5.7	-5.7	
6	400 kV	PUSAULI-VARANASI	S/C	0	299	0.0	6.3	-6.3	
7	400 kV	PUSAULI-ALLAHABAD	S/C	0	162	0.0	3.1	-3.1	
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	659	0.0	11.8	-11.8	
9	400 kV	PATNA-BALIA	Q/C	0	840	0.0	12.8	-12.8	
10	400 kV	BIHARSHARIF-BALIA	D/C	0	329	0.0	4.9	-4.9	
11	400 kV	MOTIHARL-GORAKHPUR	D/C	0	320	0.0	4.8	-4.8	
12	400 kV	BIHARSHARIF-VARANASI	D/C	86	117	0.0	0.8	-0.8	
13	220 kV	PUSAULI-SAHUPURI	S/C	0	116	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	0.5	0.0	0.5	
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0	
17	132 kV	KARMANASA-CHANDALI	S/C	0	0	0.0	0.0	0.0	
						<b>ER-NR</b>	<b>1.9</b>	<b>94.9</b>	<b>-93.0</b>
<b>Import/Export of ER (With WR)</b>									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1342	0	26.1	0.0	26.1	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	730	136	0.0	9.4	9.4	
3	765 kV	JHARSUGUDA-DURG	D/C	139	110	0.6	0.0	0.6	
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	24	322	0.0	3.2	-3.2	
5	400 kV	RANCHI-SIPAT	D/C	253	57	3.0	0.0	3.0	
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	131	0.0	2.0	-2.0	
7	220 kV	BUDHIPADAR-KORBA	D/C	80	28	0.7	0.0	0.7	
						<b>ER-WR</b>	<b>39.9</b>	<b>5.2</b>	<b>34.7</b>
<b>Import/Export of ER (With SR)</b>									
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	373	0.0	8.5	-8.5	
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	1840	0.0	48.0	-48.0	
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2640	0.0	54.1	-54.1	
4	400 kV	TALCHER-I/C	D/C	0	244	0.0	3.3	-3.3	
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>110.6</b>	<b>-110.6</b>
<b>Import/Export of ER (With NER)</b>									
1	400 kV	BINAGURI-BONGAIGAON	D/C	69	381	0.0	1.5	-1.5	
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	352	398	1.0	0.0	1.0	
3	220 kV	ALIPURDUAR-SALAKATI	D/C	17	105	0.0	0.7	-0.7	
						<b>ER-NER</b>	<b>1.0</b>	<b>2.1</b>	<b>-1.1</b>
<b>Import/Export of NER (With NR)</b>									
1	HVDC	BISWANATH CHARIALI-AGR <sup>1</sup>	D/C	0	503	0.0	10.1	-10.1	
						<b>NER-NR</b>	<b>0.0</b>	<b>10.1</b>	<b>-10.1</b>
<b>Import/Export of WR (With NR)</b>									
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	175	0.0	16.7	-16.7	
2	HVDC	VINDHYACHAL B/B	-	450	0	8.2	0.0	8.2	
3	HVDC	MUNDR-MOHINDERGARH	D/C	0	595	0.0	14.6	-14.6	
4	765 kV	GWALIOR-AGRA	D/C	0	2182	0.0	28.7	-28.7	
5	765 kV	PHAGI-GWALIOR	D/C	0	1146	0.0	18.5	-18.5	
6	765 kV	JABALPUR-ORAI	D/C	0	876	0.0	25.0	-25.0	
7	765 kV	GWALIOR-ORAI	S/C	414	0	8.1	0.0	8.1	
8	765 kV	SATNA-ORAI	S/C	0	1338	0.0	25.1	-25.1	
9	765 kV	CHITORGARH-BANASKANTHA	D/C	131	945	0.0	8.1	-8.1	
10	400 kV	ZERDA-KANKROLI	S/C	117	140	0.4	0.4	0.4	
11	400 kV	ZERDA-BHINMAL	S/C	271	241	1.2	0.0	1.2	
12	400 kV	VINDHYACHAL-RIHANE	S/C	984	0	22.9	0.0	22.9	
13	400 kV	RAPP-SHILJALPUR	D/C	124	358	0.0	1.5	-1.5	
14	220 kV	BHANPURA-RANPUR	S/C	11	0	0.0	1.2	-1.2	
15	220 kV	BHANPURA-MORAK	S/C	0	98	0.0	1.6	-1.6	
16	220 kV	MEHGAON-AURAIYA	S/C	111	0	0.6	0.1	0.6	
17	220 kV	MALANPUR-AURAIYA	S/C	81	24	1.2	0.0	1.2	
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>42.6</b>	<b>141.0</b>	<b>-98.4</b>
<b>Import/Export of WR (With SR)</b>									
1	HVDC	BHADRAWATI B/B	-	0	309	0.0	21.6	-21.6	
2	HVDC	RAIGARH-PUGALUR	D/C	0	0	0.0	0.0	0.0	
3	765 kV	SOLAPUR-RAICHUR	D/C	0	2100	0.0	31.4	-31.4	
4	765 kV	WARDHA-NIZAMABAD	D/C	0	2579	0.0	42.8	-42.8	
5	400 kV	KOLHAPUR-KUDGI	D/C	424	0	4.4	0.0	4.4	
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	90	1.7	0.0	1.7	
						<b>WR-SR</b>	<b>6.0</b>	<b>95.9</b>	<b>-89.9</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	364	351	331	8.0
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	782	0	606	14.6
	ER	TALA ( 6 * 170 ) BINAGURI RECEIPT	1056	1046	966	23.2
	NER	132KV-SALAKATI - GELEPHU	52	0	48	1.2
NEPAL	NER	132KV-RANGIA - DEOTHANG	66	0	54	1.3
	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	0	0	0	-0.5
	ER	132KV-BIHAR - NEPAL	-65	-37	-61	-1.5
BANGLADESH	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-141	11	-13	-0.3
	ER	Bheramara HVDC (Bangladesh)	-941	-739	-866	-20.8
	NER	132KV-SURAJMANI NAGAR - COMILLA (BANGLADESH)-1	77	0	-47	-1.1
	NER	132KV-SURAJMANI NAGAR - COMILLA (BANGLADESH)-2	77	0	-47	-1.1