



**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> Aug 2019

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. मुख्य महाप्रबंधक, ऊ.पू.क्षे.भा.प्रे.के., डोंगतिह, लोअर नोंग्रह, लापलंग, शिलोंग - 793006  
Chief General Manager, 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 21.08.2019.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-अगस्त-2019 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 21<sup>st</sup> August 2019, 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-Aug-19

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)	54493	45774	38831	22131	2927	164156
Peak Shortage (MW)	1084	0	0	0	152	1236
Energy Met (MU)	1225	1059	905	490	58	3736
Hydro Gen (MU)	358	107	143	123	20	751
Wind Gen (MU)	38	82	150	-----	-----	269
Solar Gen (MU)*	29.17	20.5	64.05	2.06	0.19	116
Energy Shortage (MU)	9.9	0.0	0.0	0.0	1.3	11.2
Maximum Demand Met during the day (MW) & time (from NLDC SCADA)	55916 21:23	46877 19:38	39772 07:38	23451 20:46	2970 18:37	166751 19:49

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	0.45	5.46	5.91	77.70	16.39

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	9389	0	209.5	134.7	-0.8	207	0.0	
	Haryana	8927	0	187.7	155.6	-0.3	181	0.0	
	Rajasthan	9691	0	215.6	59.8	-3.3	214	0.0	
	Delhi	5786	0	117.8	100.8	-0.9	147	0.1	
	UP	18608	0	379.5	176.4	-0.5	747	0.0	
	Uttarakhand	1846	0	41.4	14.6	-0.2	58	0.0	
	HP	1317	0	26.7	-0.4	-1.0	27	0.0	
	J&K	2178	544	41.2	19.2	2.5	349	9.9	
WR	Chandigarh	286	0	5.5	6.3	-0.7	9	0.0	
	Chhattisgarh	4041	0	94.2	39.5	0.7	243	0.0	
	Gujarat	14040	0	312.7	40.3	2.7	480	0.0	
	MP	7871	0	174.0	73.9	-4.5	622	0.0	
	Maharashtra	19586	0	431.6	146.8	1.3	305	0.0	
	Goa	541	0	11.9	11.0	0.3	73	0.0	
	DD	347	0	7.6	7.0	0.6	104	0.0	
	DNH	805	0	18.4	18.6	-0.2	88	0.0	
SR	Essar steel	408	0	8.2	8.1	0.1	265	0.0	
	Andhra Pradesh	7029	0	159.9	22.9	-1.1	425	0.0	
	Telangana	10581	0	217.8	73.6	0.0	502	0.0	
	Karnataka	8512	0	169.0	24.6	0.5	663	0.0	
	Kerala	3331	0	67.2	44.9	2.1	281	0.0	
	Tamil Nadu	13087	0	283.3	109.2	-1.8	479	0.0	
	Pondy	378	0	7.7	8.0	-0.3	41	0.0	
	ER	Bihar	5520	0	111.8	107.2	0.2	210	0.0
DVC		2979	0	63.7	-34.6	-0.2	100	0.0	
Jharkhand		1126	0	26.2	16.3	1.3	100	0.0	
Odisha		4972	0	107.0	37.4	4.4	690	0.0	
West Bengal		9095	0	180.0	104.2	1.7	360	0.0	
Sikkim		91	0	1.0	1.3	-0.3	10	0.0	
NER		Arunachal Pradesh	131	2	2.4	2.3	0.1	63	0.0
		Assam	1902	93	38.0	31.8	1.3	155	1.2
	Manipur	168	4	2.5	2.4	0.1	21	0.0	
	Meghalaya	321	0	5.4	0.4	-0.2	161	0.0	
	Mizoram	96	1	1.6	0.5	0.7	31	0.0	
	Nagaland	143	3	2.5	2.2	-0.1	50	0.0	
	Tripura	292	4	5.3	4.1	0.7	85	0.1	

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	37.8	-6.4	-29.2
Day peak (MW)	1869.7	-366.7	-1139.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	236.0	-242.6	-21.8	22.1	6.9	0.6
Actual(MU)	231.2	-241.7	-32.4	34.6	12.2	3.9
O/D/U/D(MU)	-4.8	0.9	-10.6	12.6	5.3	3.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	3243	17629	8142	2725	753	32492
State Sector	11260	17247	9330	7470	50	45357
Total	14503	34876	17472	10195	803	77848

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	486	1000	436	353	9	2284
Lignite	20	12	41	0	0	73
Hydro	358	107	143	123	20	751
Nuclear	27	31	55	0	0	113
Gas, Naptha & Diesel	41	42	15	0	23	121
RES (Wind, Solar, Biomass & Others)	83	107	255	2	0	447
Total	1015	1300	945	478	53	3791

Share of RES in total generation (%)	8.19	8.25	26.96	0.44	0.36	11.80
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	46.11	18.89	47.86	26.23	39.56	34.61

H. Diversity Factor

All India Demand Diversity Factor	1.013
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Diversity factor = Sum of regional maximum demands / All India maximum demand

\*Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

INTER-REGIONAL EXCHANGES									
								Date of Reporting : 22-Aug-19	
								Import=(+ve) /Export =(-ve) for NET (MU)	
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	765kV	GAYA-VARANASI	D/C	358	123	3.3	0.0	3.3	
2		SASARAM-FATEHPUR	S/C	376	0	4.7	0.0	4.7	
3		GAYA-BALIA	S/C	0	297	0.0	3.1	-3.1	
4	HVDC	ALIPURDUAR-AGRA	-	0	1201	0.0	25.1	-25.1	
5		PUSAULI B/B	S/C	3	198	0.0	4.8	-4.8	
6	400 kV	PUSAULI-VARANASI	S/C	0	233	0.0	4.9	-4.9	
7		PUSAULI -ALLAHABAD	S/C	73	33	0.1	0.0	0.1	
8		MUZAFFARPUR-GORAKHPUR	D/C	248	363	0.0	1.2	-1.2	
9		PATNA-BALIA	Q/C	0	503	0.0	8.8	-8.8	
10		BIHARSHARIFF-BALIA	D/C	0	153	0.0	1.9	-1.9	
11		MOTIHARI-GORAKHPUR	D/C	0	7	0.0	0.0	0.0	
12		BIHARSHARIFF-VARANASI	D/C	397	0	6.5	0.0	6.5	
13		220 kV	PUSAULI-SAHUPURI	S/C	0	157	0.0	3.0	-3.0
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0	
15		GARWAH-RIHAND	S/C	30	0	0.3	0.0	0.3	
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0	
17		KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0	
						<b>ER-NR</b>	<b>15.0</b>	<b>52.7</b>	<b>-37.7</b>
<b>Import/Export of ER (With WR)</b>									
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1728	0	33.9	0.0	33.9	
19		NEW RANCHI-DHARAMJAIGARH	D/C	1532	0	27.6	0.0	27.6	
20		JHARSUGUDA-DURG	D/C	347	0	6.0	0.0	6.0	
21	400 kV	JHARSUGUDA-RAIGARH	Q/C	690	0	12.9	0.0	12.9	
22		RANCHI-SIPAT	D/C	561	0	9.2	0.0	9.2	
23	220 kV	BUDHIPADAR-RAIGARH	S/C	50	77	0.0	0.5	-0.5	
24		BUDHIPADAR-KORBA	D/C	192	0	3.1	0.0	3.1	
						<b>ER-WR</b>	<b>92.7</b>	<b>0.5</b>	<b>92.1</b>
<b>Import/Export of ER (With SR)</b>									
25	765 kV	ANGUL-SRIKAKULAM	D/C	16.0	1244.0	0.0	14.0	-14.0	
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	204.0	215.0	0.0	0.2	-0.2	
27	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	789.0	0.0	10.5	-10.5	
28	400 kV	TALCHER-I/C	D/C	653.0	0.0	10.6	0.0	10.6	
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0	
						<b>ER-SR</b>	<b>0.0</b>	<b>24.6</b>	<b>-24.6</b>
<b>Import/Export of ER (With NER)</b>									
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	750	0.0	12.9	-13	
31		ALIPURDUAR-BONGAIGAON	D/C	150	369	0.0	3.6	-4	
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	140	0.0	2.5	-3	
						<b>ER-NER</b>	<b>0.0</b>	<b>19.0</b>	<b>-19.0</b>
<b>Import/Export of NER (With NR)</b>									
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	504	0.0	9.4	-9.4	
						<b>NER-NR</b>	<b>0.0</b>	<b>9.4</b>	<b>-9.4</b>
<b>Import/Export of WR (With NR)</b>									
34	HVDC	CHAMPA-KURUKSHETRA	D/C	0	2503	0.0	43.8	-43.8	
35		V'CHAL B/B	D/C	362	0	9.7	0.0	9.7	
36		APL -MHG	D/C	0	1459	0.0	30.2	-30.2	
37	765 kV	GWALIOR-AGRA	D/C	0	2655	0.0	49.7	-49.7	
38		PHAGI-GWALIOR	D/C	0	989	0.0	16.6	-16.6	
39		JABALPUR-ORAI	D/C	0	906	0.0	32.2	-32.2	
40		GWALIOR-ORAI	S/C	466	0	7.5	0.0	7.5	
41		SATNA-ORAI	S/C	0	1353	0.0	28.8	-28.8	
42		CHITTORGARH-BANASKANTHA	D/C	0	1061	0.0	16.4	16.4	
43		ZERDA-KANKROLI	S/C	53	146	0.1	1.6	-1.4	
44		400 kV	ZERDA -BHINMAL	S/C	180	148	1.4	0.6	0.9
45	V'CHAL -RIHAND		S/C	971	0	22.2	0.0	22.2	
46	220 kV	RAPP-SHUJALPUR	D/C	16	358	0	2	-2	
47		BHANPURA-RANPUR	S/C	10	72	0.0	0.8	-0.8	
48		BHANPURA-MORAK	S/C	0	137	0.0	2.3	-2.3	
49		MEHGAON-AURAIYA	S/C	94	0	0.8	0.0	0.8	
50		MALANPUR-AURAIYA	S/C	49	26	0.1	0.2	-0.1	
51	132kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0	
						<b>WR-NR</b>	<b>41.9</b>	<b>225.1</b>	<b>-150.4</b>
<b>Import/Export of WR (With SR)</b>									
52	HVDC	BHADRAWATI B/B	-	973	508	8.2	0.0	8.2	
53	LINK	BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0	
54	765 kV	SOLAPUR-RAICHUR	D/C	2314	198	21.7	0.1	21.6	
55		WARDHA-NIZAMABAD	D/C	930	1582	0.0	19.0	-19.0	
56	400 kV	KOLHAPUR-KUDGI	D/C	1407	0	22.6	0.0	22.6	
57	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0	
58		PONDA-AMBEWADI	S/C	0	65	0.0	1.0	-1.0	
59		XELDEM-AMBEWADI	S/C	0	36	0.6	0.0	0.6	
						<b>WR-SR</b>	<b>53.1</b>	<b>20.0</b>	<b>33.1</b>
<b>TRANSNATIONAL EXCHANGE</b>									
60		BHUTAN						<b>37.8</b>	
61		NEPAL						<b>-6.4</b>	
62		BANGLADESH						<b>-29.2</b>	

**1). All India Power System Scenario - Comparison with the same week of previous year**

Date of Reporting: 22.08.19

**Northern Region**

	15.08.19 TO 21.08.19	15.08.18 TO 21.08.18	% Increase
Peak Demand	49457	53941	-8.3
Peak Shortage	1157	1135	1.9
Energy Met	1113	1250	-11.0
Hydro	335	339	-1.1
Wind	25	14	75.7

**Eastern Region**

	15.08.19 TO 21.08.19	15.08.18 TO 21.08.18	% Increase
Peak Demand	21077	20942	0.6
Peak Shortage	8	260	-97.0
Energy Met	448	455	-1.6
Hydro	127	104	22.0
Wind	-	-	-

**Western Region**

	15.08.19 TO 21.08.19	15.08.18 TO 21.08.18	% Increase
Peak Demand	42867	43310	-1.0
Peak Shortage	10	10	1.4
Energy Met	980	995	-1.6
Hydro	103	21	389.8
Wind	79	87	-9.3

**North-Eastern Region**

	15.08.19 TO 21.08.19	15.08.18 TO 21.08.18	% Increase
Peak Demand	2767	2658	4.1
Peak Shortage	192	147	29.9
Energy Met	53	52	2.9
Hydro	22	22	4.0
Wind	-	-	-

**Southern Region**

	15.08.19 TO 21.08.19	15.08.18 TO 21.08.18	% Increase
Peak Demand	38384	37570	2.2
Peak Shortage	0	0	--
Energy Met	893	820	8.8
Hydro	140	160	-12.7
Wind	106	224	-52.5

**All India Summary**

	15.08.19 TO 21.08.19	15.08.18 TO 21.08.18	% Increase
Peak Demand	154552	158422	-2.4
Peak Shortage	1367	1553	-12.0
Energy Met	3486	3573	-2.4
Hydro	726	645	12.6
Wind	210	325	-35.4
Gen Outage	82662	74996	10.2

**All India Frequency Profile**

Date	<49.7		49.7-49.8		AVE. Freq.	FVI
	21.08.19	21.08.18	21.08.19	21.08.18		
All India	0.0	0.0	0.5	0.4	50.00	0.032

  

Date	49.8-49.9		<49.9		49.9-50.05		>50.05	
	21.08.19	21.08.18	21.08.19	21.08.18	21.08.19	21.08.18	21.08.19	21.08.18
All India	5.46	6.82	5.91	7.2	77.70	81.52	16.39	11.26

**Diversity factor for 21.08.19**

Regional Demand Diversity Factor	NR	WR	SR	ER	NER
	1.038	1.016	1.079	1.014	1.028

  

All India Demand Diversity Factor	Based on Regional Max Demands	Based on States' Max Demands
	1.013	1.052

Diversity Factor = Sum of constituent systems' max demands / System max demand

**2). Market Data (Power Exchange)**

For Date: 22.08.19

Exchange	Volume	
	Provisional (MUs)	Final (MUs)
PXI	0.00	0.00
IEX	173.11	173.11
<b>Total</b>	<b>173.11</b>	<b>173.11</b>

Unconstrained Market Clearing Price (Rs./kWh)	
Max	8.95
Min	2.80
Avg	3.75

Link	Congestion	Time Block
NR DRAWAL		NIL
ER-NR		NIL
SR DRAWAL		NIL
ER-SR		NIL
S2 DRAWAL		NIL
S3 DRAWAL		NIL