



**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: 21<sup>st</sup> Sep 2021

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., डोंगतेह, 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 20.09.2021.**

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-सितंबर-2021 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 20<sup>th</sup> September 2021, 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: 21-Sep-2021

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)	58983	49611	42456	21050	2999	175099
Peak Shortage (MW)	1426	0	801	599	0	2826
Energy Met (MU)	1308	1124	1036	469	57	3995
Hydro Gen (MU)	325	55	157	135	24	696
Wind Gen (MU)	10	71	44	-	-	125
Solar Gen (MU)*	49.44	28.45	98.99	4.50	0.26	182
Energy Shortage (MU)	8.21	0.00	1.60	6.03	0.00	15.84
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	59778	49645	51841	21544	3036	180749
Time Of Maximum Demand Met (From NLDC SCADA)	21:30	10:34	11:58	21:22	18:40	11:45

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	0.028	0.00	0.14	3.06	3.19	75.33	21.48

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	11457	0	257.4	167.3	-1.2	131	0.00
	Haryana	8845	0	186.4	130.9	0.8	275	2.13
	Rajasthan	10303	0	224.7	75.4	3.9	690	1.69
	Delhi	5085	0	106.5	96.4	-1.7	80	0.00
	UP	20764	0	407.9	129.0	-0.6	500	0.33
	Uttarakhand	1991	35	43.5	13.7	1.0	134	0.61
	HP	1551	0	31.6	-2.7	1.0	313	0.00
	J&K(UT) & Ladakh(UT)	2211	250	44.4	22.0	-2.4	149	3.45
WR	Chandigarh	363	0	6.1	6.3	-0.2	46	0.00
	Chhattisgarh	3673	0	85.2	40.0	0.1	237	0.00
	Gujarat	14153	0	307.8	162.6	0.4	1200	0.00
	MP	9864	0	210.3	126.3	1.2	458	0.00
	Maharashtra	21502	0	463.6	174.7	-1.4	691	0.00
	Goa	598	0	12.6	11.3	0.6	50	0.00
	DD	338	0	7.3	7.0	0.3	60	0.00
	DNH	858	0	19.7	19.6	0.1	86	0.00
SR	AMNSIL	822	0	17.9	4.0	-0.5	214	0.00
	Andhra Pradesh	10026	0	202.1	97.1	2.3	987	1.60
	Telangana	11366	0	216.5	55.7	-0.4	501	0.00
	Karnataka	12125	0	219.4	46.7	-0.4	493	0.00
	Kerala	3787	0	76.7	44.3	0.2	314	0.00
	Tamil Nadu	15080	0	313.2	183.7	0.7	1502	0.00
	Puducherry	425	0	8.7	8.8	-0.1	46	0.00
	ER	Bihar	6051	0	118.6	111.0	1.1	457
DVC		3128	0	67.3	-41.2	-0.3	165	0.00
Jharkhand		1430	149	28.4	22.6	-2.0	247	2.00
Odisha		5273	0	105.2	34.4	0.9	518	0.00
West Bengal		7313	0	148.3	42.2	-0.8	389	0.00
Sikkim		98	0	1.4	1.4	0.0	21	0.00
NER	Arunachal Pradesh	145	0	2.4	2.5	-0.4	22	0.00
	Assam	1989	0	37.6	31.3	0.5	155	0.00
	Manipur	192	0	2.5	2.5	-0.1	35	0.00
	Meghalaya	317	0	5.5	1.9	0.0	38	0.00
	Mizoram	100	0	1.5	1.2	-0.1	25	0.00
	Nagaland	134	0	2.5	2.0	0.1	22	0.00
	Tripura	275	0	4.8	4.7	-0.2	46	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	42.6	0.9	-20.2
Day Peak (MW)	2060.0	176.0	-868.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	215.2	-123.5	57.8	-144.4	-5.1	0.0
Actual(MU)	210.1	-123.5	61.4	-147.6	-5.3	-5.0
OD/UD(MU)	-5.1	0.0	3.6	-3.3	-0.2	-5.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	2989	18051	6602	2375	580	30596	43
State Sector	7075	21167	7805	3755	11	39813	57
Total	10064	39218	14407	6130	591	70409	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	631	1031	561	499	16	2738	67
Lignite	27	10	38	0	0	75	2
Hvdro	325	55	157	135	24	696	17
Nuclear	31	28	55	0	0	114	3
Gas, Naptha & Diesel	31	42	11	0	27	110	3
RES (Wind, Solar, Biomass & Others)	75	100	172	5	0	353	9
Total	1119	1266	995	639	68	4087	100

Share of RES in total generation (%)	6.73	7.91	17.33	0.71	0.38	8.63
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	38.47	14.49	38.64	21.84	36.41	28.45

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.028
Based on State Max Demands	1.071

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: 21-Sep-2021

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	1451	0.0	33.5	-33.5
2	HVDC	PUSAULI B/B	-	0	245	0.0	6.0	-6.0
3	765 kV	GAYA-VARANASI	2	274	139	1.1	0.0	1.1
4	765 kV	SASARAM-FATEHPUR	1	116	60	0.6	0.0	0.6
5	765 kV	GAYA-BALIA	1	0	543	0.0	9.1	-9.1
6	400 kV	PUSAULL-VARANASI	1	0	212	0.0	4.4	-4.4
7	400 kV	PUSAULI-ALLAHABAD	1	0	93	0.0	1.4	-1.4
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	540	0.0	9.1	-9.1
9	400 kV	PATNA-BALIA	4	0	898	0.0	16.2	-16.2
10	400 kV	BIHARSHARIFF-BALIA	2	0	220	0.0	3.4	-3.4
11	400 kV	MOTIHARI-GORAKHPUR	2	0	355	0.0	6.5	-6.5
12	400 kV	BIHARSHARIFF-VARANASI	2	71	65	0.3	0.0	0.3
13	220 kV	PUSAULL-SAHUPURI	1	27	77	0.0	0.6	-0.6
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	20	0	0.4	0.0	0.4
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDALI	1	0	0	0.0	0.0	0.0
ER-NR						2.4	90.1	-87.8
<b>Import/Export of ER (With WR)</b>								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	257	939	0.0	4.3	-4.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1047	137	12.0	0.0	12.0
3	765 kV	JHARSUGUDA-DURG	2	0	286	0.0	3.2	-3.2
4	400 kV	JHARSUGUDA-RAIGARH	4	0	494	0.0	5.6	-5.6
5	400 kV	RANCHI-SIPAT	2	230	110	1.8	0.0	1.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	123	0.0	1.4	-1.4
7	220 kV	BUDHIPADAR-KORBA	2	139	0	1.4	0.0	1.4
ER-WR						15.2	14.5	0.7
<b>Import/Export of ER (With SR)</b>								
1	HVDC	JEYPORE-GAZIWAKA B/B	2	0	444	0.0	9.2	-9.2
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1637	0.0	34.1	-34.1
3	765 kV	ANGUL-SIRSAKULAM	2	0	2453	0.0	44.3	-44.3
4	400 kV	TALCHER-IC	2	271	340	0.0	1.6	-1.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
ER-SR						0.0	87.5	-87.5
<b>Import/Export of ER (With NER)</b>								
1	400 kV	BINAGURI-BONGAIGAON	2	0	350	0.0	6.0	-6.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	28	273	0.0	2.2	-2.2
3	220 kV	ALIPURDUAR-SALAKATI	2	0	108	0.0	1.7	-1.7
ER-NER						0.0	9.8	-9.8
<b>Import/Export of NER (With NR)</b>								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	703	0.0	16.8	-16.8
NER-NR						0.0	16.8	-16.8
<b>Import/Export of WR (With NR)</b>								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	957	0.0	22.9	-22.9
2	HVDC	VINDHYACHAL B/B	-	449	153	4.9	0.2	4.8
3	HVDC	MUNDIRA-MOHINDERGARH	2	0	447	0.0	10.9	-10.9
4	765 kV	GWALIOR-AGRA	2	0	1428	0.0	22.1	-22.1
5	765 kV	GWALIOR-PHAGI	2	0	1773	0.0	33.5	-33.5
6	765 kV	JABALPUR-ORAI	2	0	771	0.0	25.9	-25.9
7	765 kV	GWALIOR-ORAI	1	779	0	14.7	0.0	14.7
8	765 kV	SATNA-ORAI	1	0	860	0.0	18.4	-18.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1301	0	17.2	0.0	17.2
10	765 kV	VINDHYACHAL-VARANASI	2	0	2939	0.0	51.2	-51.2
11	400 kV	ZERDA-KANKROLI	1	300	0	4.6	0.0	4.6
12	400 kV	ZERDA-BHINMAL	1	487	0	7.0	0.0	7.0
13	400 kV	VINDHYACHAL-RIHAND	1	953	0	21.9	0.0	21.9
14	400 kV	RAPP-SHUJALPUR	2	56	332	0.1	3.7	-3.6
15	220 kV	BHANPURA-RANPUR	1	42	37	0.2	0.3	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.7	0.0	0.7
17	220 kV	MEHGAON-AURAIYA	1	142	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	102	0	2.1	0.0	2.1
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						74.6	189.0	-114.4
<b>Import/Export of WR (With SR)</b>								
1	HVDC	BHADRAWATI B/B	-	797	0	8.2	0.0	8.2
2	HVDC	RAIGARH-PUGALUR	2	0	501	0.0	12.2	-12.2
3	765 kV	SOLAPUR-RAICHUR	2	1005	858	6.1	4.4	1.7
4	765 kV	WARDHA-NIZAMABAD	2	0	1967	0.0	24.4	-24.4
5	400 kV	KOLHAPUR-KUDGI	2	1019	0	17.1	0.0	17.1
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	0	80	1.5	0.0	1.5
WR-SR						32.8	41.0	-8.2

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)	788	0	598	14.3
	ER	400kV TALA-BINAGURI 1,2,4 & 400kV MALBASE - BINAGURI i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	917	747	869	20.9
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	270	237	238	5.7
	NER	132kV GELEPHU-SALAKATI	28	16	23	0.6
	NER	132kV MOTANGA-RANGIA	56	33	46	1.1
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-74	0	-14	-0.3
	ER	NEPAL IMPORT (FROM BIHAR)	140	0	21	0.5
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	110	-45	30	0.7
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-729	-722	-723	-17.4
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-139	0	-117	-2.8