



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: 23rd July 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 , लापालंग, 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 22.07.2021.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-जुलाई-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 22nd July 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: 23-Jul-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)	59957	48711	36435	23273	2993	171369
Peak Shortage (MW)	200	0	0	0	4	204
Energy Met (MU)	1322	1110	803	512	59	3805
Hydro Gen (MU)	354	32	130	113	35	663
Wind Gen (MU)	15	197	246	-	-	457
Solar Gen (MU)*	45.82	24.30	44.21	4.62	0.28	119
Energy Shortage (MU)	3.55	0.00	0.00	0.00	0.04	3.59
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	62368	48826	37255	23622	3023	171494
Time Of Maximum Demand Met (From NLDC SCADA)	22:35	19:29	19:19	21:11	20:53	20:31

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	0.021	0.00	0.00	0.95	0.95	79.17	19.88

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	11010	0	241.3	174.8	-1.6	88	0.00
	Haryana	8496	0	179.2	156.7	0.0	259	0.00
	Rajasthan	12099	0	263.5	109.1	3.7	509	0.00
	Delhi	5325	0	110.7	98.6	-1.6	144	0.01
	UP	21209	0	406.6	185.4	-1.1	346	0.09
	Uttarakhand	1826	0	40.5	13.7	0.5	105	0.00
	HP	1481	0	27.2	-5.4	-3.5	67	0.00
	J&K(UT) & Ladakh(UT)	2447	100	47.0	21.9	-0.2	340	3.45
WR	Chhattisgarh	292	0	5.8	6.1	-0.3	25	0.00
	Gujarat	4034	0	94.6	49.5	-2.0	242	0.00
	Maharashtra	16101	0	354.2	149.0	4.7	790	0.00
	MP	9574	0	215.8	134.0	-0.9	405	0.00
	Maharashtra	17815	0	388.2	107.8	-2.1	767	0.00
	Goa	541	0	11.2	10.4	0.2	79	0.00
	DD	324	0	7.3	7.1	0.1	23	0.00
	DNH	849	0	19.6	19.5	0.1	44	0.00
SR	AMNSIL	882	0	18.7	5.3	0.1	278	0.00
	Andhra Pradesh	6790	0	142.0	31.5	-0.8	312	0.00
	Telangana	6385	0	134.4	30.9	-0.7	417	0.00
	Karnataka	7903	0	145.6	-23.9	2.5	1433	0.00
	Kerala	3183	0	65.9	26.5	-1.1	202	0.00
	Tamil Nadu	13576	0	306.9	104.0	-1.5	493	0.00
	Puducherry	393	0	8.3	8.6	-0.3	23	0.00
	ER	Bihar	6403	0	127.6	120.8	0.8	308
DVC		2984	0	65.5	-39.0	-0.8	430	0.00
Jharkhand		1611	0	30.6	24.7	-1.5	238	0.00
Odisha		5749	0	111.1	38.2	-0.4	398	0.00
West Bengal		8441	0	175.6	56.2	1.2	417	0.00
Sikkim		81	0	1.3	1.5	-0.2	16	0.00
NER	Arunachal Pradesh	139	0	2.4	2.5	-0.1	47	0.01
	Assam	2023	1	39.1	30.7	1.2	170	0.00
	Manipur	193	0	2.7	2.6	0.1	20	0.01
	Meghalaya	311	0	5.4	2.5	-0.1	71	0.00
	Mizoram	102	1	1.7	1.5	0.1	31	0.01
	Nagaland	160	0	2.6	2.6	-0.3	27	0.01
	Tripura	236	0	4.8	4.4	-0.4	96	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	21.6	-3.5	-19.9
Day Peak (MW)	979.0	-288.5	-923.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	375.4	-228.9	-78.7	-62.8	-5.0	0.0
Actual(MU)	368.4	-220.2	-79.2	-64.6	-7.3	-3.0
O/D/U/D(MU)	-7.0	8.7	-0.5	-1.8	-2.4	-3.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	8102	16508	11492	1160	259	37520	44
State Sector	11000	21776	10158	5395	11	48340	56
Total	19102	38284	21650	6555	270	85860	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	470	1020	356	475	10	2331	60
Lignite	22	12	37	0	0	71	2
Hydro	354	32	130	113	35	663	17
Nuclear	31	32	42	0	0	105	3
Gas, Naptha & Diesel	22	29	12	0	27	89	2
RES (Wind, Solar, Biomass & Others)	82	221	320	5	0	629	16
Total	981	1346	896	592	71	3887	100

Share of RES in total generation (%)	8.37	16.44	35.72	0.78	0.39	16.17
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	47.57	21.19	54.90	19.80	49.13	35.92

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.021
Based on State Max Demands	1.055

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-2021

Sl No	Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)	
Import/Export of ER (With NR)									
1	HVDC	ALIPURDUAR-AGRA	2	0	1000	0.0	18.6	-18.6	
2	HVDC	PUSAULI B/B	-	0	245	0.0	5.7	-5.7	
3	765 kV	GAYA-VARANASI	2	154	712	0.0	8.8	-8.8	
4	765 kV	SASARAM-FATEHPUR	1	355	24	3.2	0.0	3.2	
5	765 kV	GAYA-BALIA	1	0	651	0.0	10.8	-10.8	
6	400 kV	PUSAULI-VARANASI	1	0	261	0.0	4.9	-4.9	
7	400 kV	PUSAULI-ALLAHABAD	1	6	82	0.0	0.9	-0.9	
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	553	0.0	7.8	-7.8	
9	400 kV	PATNA-BALIA	4	0	974	0.0	17.6	-17.6	
10	400 kV	BIHARSHARIF-BALIA	2	0	332	0.0	5.2	-5.2	
11	400 kV	MOTIHARI-GORAKHPUR	2	0	319	0.0	4.3	-4.3	
12	400 kV	BIHARSHARIF-VARANASI	2	159	202	0.0	1.3	-1.3	
13	220 kV	PUSAULI-SAHUPURI	1	0	155	0.0	2.8	-2.8	
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0	
15	132 kV	GARWAH-RIHAND	1	20	0	0.6	0.0	0.6	
16	132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0	
17	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0	
						ER-NR	3.8	88.6	-84.8
Import/Export of ER (With WR)									
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	259	789	0.0	2.6	-2.6	
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	2234	0	35.6	0.0	35.6	
3	765 kV	JHARSUGUDA-DURG	2	321	0	4.4	0.0	4.4	
4	400 kV	JHARSUGUDA-RAIGARH	4	41	232	0.0	1.4	-1.4	
5	400 kV	RANCHI-SIPAT	2	567	0	9.6	0.0	9.6	
6	220 kV	BUDHIPADAR-RAIGARH	1	0	132	0.0	2.0	-2.0	
7	220 kV	BUDHIPADAR-KORBA	2	121	0	1.4	0.0	1.4	
						ER-WR	51.1	6.0	45.1
Import/Export of ER (With SR)									
1	HVDC	JEYPORE-GAZUWAKA B/B	2	303	0	7.4	0.0	7.4	
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1338	0.0	23.1	-23.1	
3	765 kV	ANGUL-SRIKAKULAM	2	0	2114	0.0	27.5	-27.5	
4	400 kV	TALCHER-IC	2	579	606	0.1	0.0	0.1	
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0	
						ER-SR	7.4	50.6	-43.3
Import/Export of ER (With NER)									
1	400 kV	BINAGURI-BONGAIGAON	2	43	367	0.0	3.6	-3.6	
2	400 kV	ALIPURDUAR-BONGAIGAON	2	68	545	0.0	3.6	-3.6	
3	220 kV	ALIPURDUAR-SALAKATI	2	0	131	0.0	1.5	-1.5	
						ER-NER	0.0	8.6	-8.6
Import/Export of NER (With NR)									
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	1005	0.0	17.8	-17.8	
						NER-NR	0.0	17.8	-17.8
Import/Export of WR (With NR)									
1	HVDC	CHAMPA-KURUKSHETRA	2	0	4540	0.0	78.1	-78.1	
2	HVDC	VINDHYACHAL B/B	-	0	203	0.0	4.8	-4.8	
3	HVDC	MUNDRU-MOHINDERGARH	2	0	1453	0.0	26.9	-26.9	
4	765 kV	GWALIOR-AGRA	2	0	3099	0.0	58.2	-58.2	
5	765 kV	GWALIOR-PHAGI	2	0	1940	0.0	32.8	-32.8	
6	765 kV	JABALPUR-ORAI	2	0	1356	0.0	48.8	-48.8	
7	765 kV	GWALIOR-ORAI	1	645	0	12.3	0.0	12.3	
8	765 kV	SATNA-ORAI	1	0	1526	0.0	31.3	-31.3	
9	765 kV	BANASKANTHA-CHITORGARH	2	227	849	0.0	8.2	-8.2	
10	400 kV	ZERDA-KANKROLI	1	77	101	0.0	0.2	-0.2	
11	400 kV	ZERDA-BHINMAL	1	171	221	0.0	0.4	-0.4	
12	400 kV	VINDHYACHAL -RIHAND	1	974	0	21.6	0.0	21.6	
13	400 kV	RAPP-SHUJALPUR	2	0	692	0.0	9.7	-9.7	
14	220 kV	BHANPURA-RANPUR	1	0	135	0.0	2.3	-2.3	
15	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.8	-1.8	
16	220 kV	MEHGAON-AURAIYA	1	62	17	0.1	0.5	-0.4	
17	220 kV	MALANPUR-AURAIYA	1	31	46	0.4	0.1	0.3	
18	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0	
19	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0	
						WR-NR	34.3	304.0	-269.7
Import/Export of WR (With SR)									
1	HVDC	BHADRAWATI B/B	-	794	0	11.9	0.0	11.9	
2	HVDC	RAIGARH-PUGALUR	2	2146	0	48.8	0.0	48.8	
3	765 kV	SOLAPUR-RAICHUR	2	1401	562	15.7	0.0	15.7	
4	765 kV	WARDHA-NIZAMABAD	2	613	1131	0.0	5.7	-5.7	
5	400 kV	KOLHAPUR-KUDGI	2	1371	0	24.9	0.0	24.9	
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	1	89	1.3	0.0	1.3	
						WR-SR	102.6	5.7	96.9
INTERNATIONAL EXCHANGES									
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)	645	0	618	14.8			
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE -BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	0	0	0	0.0			
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	234	0	204	4.9			
	NER	132kV GELEPHU-SALAKATI	32	0	23	0.6			
	NER	132kV MOTANGA-RANGIA	69	43	55	1.3			
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-75	0	-45	-1.1			
	ER	NEPAL IMPORT (FROM BIHAR)	-84	-9	-20	-0.5			
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	-130	27	-80	-1.9			
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-789	-592	-723	-17.4			
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-134	0	-105	-2.5			