



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 Nov 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 22.11.2021.

महोदय/Dear Sir,

आईईजीसी-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-नवंबर-2021 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 22nd November 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-Nov-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 19:00 hrs; from RLDCs)	45708	54592	37848	19078	2451	159677
Peak Shortage (MW)	450	0	0	392	0	842
Energy Met (MU)	920	1230	782	380	44	3355
Hydro Gen (MU)	115	35	106	52	13	321
Wind Gen (MU)	12	62	9	-	-	84
Solar Gen (MU)*	60.90	35.29	83.66	4.20	0.14	184
Energy Shortage (MU)	5.01	0.00	0.00	2.47	0.00	7.48
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	47427	55980	39689	19218	2531	163674
Time Of Maximum Demand Met (From NLDC SCADA)	18:36	10:55	18:29	17:51	17:17	18:31

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	0.030	0.00	0.07	4.49	4.56	76.62	18.82

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	5860	0	112.5	55.7	-0.8	170	0.40
	Haryana	6019	0	115.0	83.6	-0.4	144	0.00
	Rajasthan	12760	0	235.6	63.1	-1.3	350	0.00
	Delhi	3463	0	60.9	50.4	-1.4	198	0.00
	UP	15457	0	274.1	110.8	-0.4	732	1.16
	Uttarakhand	1872	0	34.4	23.4	0.1	213	0.00
	HP	1684	0	30.1	20.4	-0.1	295	0.00
	J&K(UT) & Ladakh(UT)	2888	250	54.7	48.9	0.2	420	3.45
	Chandigarh	181	0	3.0	3.7	-0.7	3	0.00
	WR	Chhattisgarh	3519	0	75.1	25.1	1.3	333
Gujarat		16268	0	346.3	196.0	2.5	534	0.00
MP		13009	0	269.7	173.8	0.0	459	0.00
Maharashtra		22447	0	481.0	166.2	-6.1	825	0.00
Goa		616	0	12.5	11.9	-0.1	45	0.00
DD		347	0	7.5	7.2	0.3	33	0.00
DNH		847	0	19.5	19.5	0.0	53	0.00
SR	AMNSIL	836	0	18.0	9.0	0.2	272	0.00
	Andhra Pradesh	7526	0	147.7	59.7	-0.2	514	0.00
	Telangana	6936	0	142.4	44.4	0.3	622	0.00
	Karnataka	7637	0	147.9	42.8	1.9	1138	0.00
	Kerala	3502	0	71.7	31.0	-0.5	219	0.00
	Tamil Nadu	13466	0	264.5	151.0	1.0	627	0.00
	Puducherry	378	0	7.3	7.5	-0.1	52	0.00
ER	Bihar	4123	0	71.6	61.8	-1.1	215	0.00
	DVC	3167	130	65.8	-37.5	-0.9	289	1.20
	Jharkhand	1542	0	27.0	23.3	-0.7	179	1.27
	Odisha	4853	0	94.9	33.0	-0.7	338	0.00
	West Bengal	6811	0	119.2	11.3	0.4	383	0.00
NER	Sikkim	117	0	1.8	1.7	0.1	30	0.00
	Arunachal Pradesh	132	0	2.2	2.1	-0.1	50	0.00
	Assam	1424	0	24.1	18.2	0.1	61	0.00
	Manipur	210	0	2.9	3.0	-0.1	51	0.00
	Meghalaya	366	0	6.9	5.0	0.1	42	0.00
	Mizoram	109	0	1.7	1.4	-0.2	4	0.00
	Nagaland	139	0	2.2	2.0	0.0	55	0.00
	Tripura	228	0	3.6	1.9	-0.3	24	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	12.8	1.6	-18.4
Day Peak (MW)	640.0	122.0	-854.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	191.8	-88.8	82.6	-180.3	-5.1	0.0
Actual(MU)	179.7	-91.5	90.9	-179.8	-4.3	-5.0
O/D/U/D(MU)	-12.1	-2.6	8.3	0.6	0.8	-5.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6310	16025	11832	1800	409	36375	44
State Sector	13325	19252	11401	3208	11	47196	56
Total	19635	35277	23233	5008	420	83571	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	489	1151	396	536	11	2583	75
Lignite	24	11	31	0	0	66	2
Hvdro	115	35	106	52	13	321	9
Nuclear	27	32	45	0	0	103	3
Gas, Naptha & Diesel	14	8	9	0	28	59	2
RES (Wind, Solar, Biomass & Others)	93	98	117	4	0	313	9
Total	761	1335	705	592	53	3445	100
Share of RES in total generation (%)	12.21	7.37	16.62	0.71	0.27	9.08	
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	30.80	12.35	38.11	9.44	25.16	21.39	

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.007
Based on State Max Demands	1.043

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-Nov-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	526	0.0	13.6	-12.6
2	HVDC	PUSAULI B/B	-	0	249	0.0	5.9	-5.9
3	765 kV	GAYA-VARANASI	2	84	874	0.0	9.9	-9.9
4	765 kV	SASARAM-FATEHPUR	1	0	650	0.0	7.2	-7.2
5	765 kV	GAYA-BALIA	1	0	441	0.0	7.7	-7.7
6	400 kV	PUSAULI-VARANASI	1	0	152	0.0	2.8	-2.8
7	400 kV	PUSAULI-ALLAHABAD	1	0	185	0.0	3.2	-3.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	610	0.0	9.3	-9.3
9	400 kV	PATNA-BALIA	4	0	895	0.0	14.8	-14.8
10	400 kV	BIHARSHARIFF-BALIA	2	9	346	0.0	4.0	-4.0
11	400 kV	MOTIHARI-GORAKHPUR	2	0	390	0.0	6.0	-6.0
12	400 kV	BIHARSHARIFF-VARANASI	2	41	366	0.0	3.9	-3.9
13	220 kV	PUSAULI-SAHUPURI	1	11	79	0.0	0.9	-0.9
14	132 kV	SONENAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	25	0	0.0	0.0	0.0
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	87.9	-87.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	0	1257	0.0	14.5	-14.5
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	274	717	0.0	4.6	-4.6
3	765 kV	JHARSUGUDA-DURG	2	0	720	0.0	7.0	-7.0
4	400 kV	JHARSUGUDA-RAIGARH	4	71	294	0.0	3.5	-3.5
5	400 kV	RANCHI-SIPAT	2	87	217	0.0	0.9	-0.9
6	220 kV	BUDHIPADAR-RAIGARH	1	30	79	0.0	0.8	-0.8
7	220 kV	BUDHIPADAR-KORBA	2	132	0	1.7	0.0	1.7
						ER-WR	31.1	-29.4
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	394	0.0	8.7	-8.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1984	0.0	40.5	-40.5
3	765 kV	ANGUL-SRIKAKULAM	2	0	3149	0.0	53.3	-53.3
4	400 kV	TALCHER-I/C	2	1067	624	1.0	0.0	1.0
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0
						ER-SR	102.5	-102.5
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	266	0.0	4.4	-4.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	105	231	0.0	2.2	-2.2
3	220 kV	ALIPURDUAR-SALAKATI	2	0	63	0.0	0.9	-0.9
						ER-NER	7.5	-7.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
						NER-NR	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2526	0.0	34.2	-34.2
2	HVDC	VINDHYACHAL B/B	-	450	0	12.1	0.0	12.1
3	HVDC	MUNDRAMOHINDERGARH	2	0	0	0.0	0.0	0.0
4	765 kV	GWALIOR-AGRA	2	0	1623	0.0	26.0	-26.0
5	765 kV	GWALIOR-PHAGI	2	0	2090	0.0	34.1	-34.1
6	765 kV	JABALPUR-ORAI	2	0	906	0.0	26.4	-26.4
7	765 kV	GWALIOR-ORAI	1	986	0	14.8	0.0	14.8
8	765 kV	SATNA-ORAI	1	0	1124	0.0	21.8	-21.8
9	765 kV	BANASKANTHA-CHITORGARH	2	1459	0	22.7	0.0	22.7
10	765 kV	VINDHYACHAL-VARANASI	2	0	1911	0.0	35.7	-35.7
11	400 kV	ZERDA-KANKROLI	1	315	0	5.2	0.0	5.2
12	400 kV	ZERDA -BHNMAL	1	413	0	5.5	0.0	5.5
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	21.8	0.0	21.8
14	400 kV	RAPP-SHUALPUR	2	144	240	0.7	1.3	-0.6
15	220 kV	BHANPURA-RANPUR	1	108	7	1.4	0.0	1.4
16	220 kV	BHANPURA-MORAK	1	0	30	2.1	0.0	2.1
17	220 kV	MEHGAON-AURAIYA	1	144	0	1.4	0.0	1.4
18	220 kV	MALANPUR-AURAIYA	1	103	0	2.2	0.0	2.2
19	132 kV	GWALIOR-SAWAIMADHOPUR	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	179.3	-89.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	8	0.0	0.0	0.0
2	HVDC	RAIGARH-PUGALUR	2	964	1501	6.5	0.0	6.5
3	765 kV	SOLAPUR-RAICHUR	2	1070	2557	0.0	17.7	-17.7
4	765 kV	WARDHA-NIZAMABAD	2	0	2475	0.0	31.6	-31.6
5	400 kV	KOLHAPUR-KUDGI	2	884	102	9.7	0.0	9.7
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	95	1.8	0.0	1.8
						WR-SR	49.4	-31.3

INTERNATIONAL EXCHANGES			Import(+ve)/Export(-ve) Energy Exchange (MU)			
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)	198	0	165	4.0
	ER	400kV TALA-BINAGURI 1,2,3 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW))	371	0	333	8.0
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	49	0	25	0.6
	NER	132kV GELEPHU-SALAKATI	11	-2	6	0.1
	NER	132kV MOTANGA-RANGIA	13	-8	5	0.1
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.0
BANGLADESH	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	122	28	65	1.6
	ER	BHERAMARA B/B HVDC (BANGLADESH)	-745	-499	-672	-16.1
BANGLADESH	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-109	0	-93	-2.2