National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
GRID CONTROLLER OF INDIA LIMITED
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
(Government of India Enterprise/ भारत सरकार का उद्यम)
B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016
बी-9, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 22nd December 2022

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., डोंगतिएह, 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 21.12.2022.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21- दिसंबर -2022 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उप्लब्ध 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 21st December 2022, is available at the NLDC website.

धन्यवाद,

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली

Report for previous day Date of Reporting: 22-Dec-2022

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)	53113	58421	42514	18492	2601	175141
Peak Shortage (MW)	1122	0	0	311	0	1433
Energy Met (MU)	1127	1448	1001	401	46	4023
Hydro Gen (MU)	125	44	96	28	10	304
Wind Gen (MU)	13	55	54	-	-	121
Solar Gen (MU)*	101.97	54.01	109.33	2.02	0.70	268
Energy Shortage (MU)	7.67	0.00	0.00	1.95	0.05	9.67
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	56897	69995	50949	20816	2684	197495
Time Of Maximum Demand Met (From NLDC SCADA)	11:25	10:27	10:02	17:50	17:17	10:46

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	0.097	0.00	1.20	6.09	7.29	54.30	38.41

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	7178	0	137.8	32.2	-1.5	119	0.00
	Haryana	7773	0	148.0	79.0	-0.9	184	0.00
	Rajasthan	15957	0	310.9	111.0	-1.4	183	4.36
	Delhi	4256	0	72.8	66.0	-2.1	179	0.00
	UP	17511	293	319.2	82.2	-1.3	337	1.88
	Uttarakhand	2184	0	41.1	28.8	-0.1	123	0.37
	HP	1925	0	34.9	26.9	0.2	111	0.00
	J&K(UT) & Ladakh(UT)	2681	0	58.7	56.2	-2.6	59	1.06
	Chandigarh	250	0	4.0	4.2	-0.1	23	0.00
WR	Chhattisgarh	4701	0	100.6	55.2	-0.9	153	0.00
	Gujarat	19550	0	396.1	222.1	-4.9	601	0.00
	MP	16624	0	324.5	189.7	-4.6	370	0.00
	Maharashtra	27108	0	556.9	181.6	3.3	631	0.00
	Goa	655	0	12.6	12.4	-0.4	56	0.00
	DNHDDPDCL	1211	0	27.9	28.1	-0.2	31	0.00
	AMNSIL	771	0	17.3	11.0	0.0	267	0.00
	BALCO	512	0	12.2	12.2	0.0	0	0.00
SR	Andhra Pradesh	9312	0	181.5	66.4	-0.9	324	0.00
	Telangana	12002	0	211.0	87.9	-0.7	614	0.00
	Karnataka	12160	0	212.0	76.6	0.7	626	0.00
	Kerala	3997	0	78.3	54.8	-0.3	281	0.00
	Tamil Nadu	14886	0	310.0	176.3	-0.7	517	0.00
	Puducherry	391	0	8.6	8.2	-0.3	43	0.00
ER	Bihar	4838	0	82.8	72.8	-2.0	107	0.09
	DVC	3554	0	72.1	-40.8	-0.1	387	0.00
	Jharkhand	1593	0	29.2	22.4	-1.5	146	1.86
	Odisha	4802	0	94.5	31.3	-1.2	321	0.00
	West Bengal	6617	0	120.7	9.6	-2.4	351	0.00
	Sikkim	125	0	2.0	1.9	0.1	78	0.00
NER	Arunachal Pradesh	144	0	2.4	2.4	-0.2	51	0.00
	Assam	1494	0	25.4	20.3	-0.6	75	0.05
	Manipur	225	0	3.3	3.2	0.1	29	0.00
	Meghalaya	380	0	6.7	5.7	-0.2	136	0.00
	Mizoram	135	0	1.9	1.6	-0.1	28	0.00
	Nagaland	146	0	2.4	2.0	0.2	41	0.00
	Tripura	228	0	3.7	3.7	-0.2	78	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	0.8	-4.1	-22.7
Day Peak (MW)	159.0	-73.0	-1053.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	146.6	-88.9	109.8	-169.6	2.1	0.0
Actual(MU)	147.2	-85.9	112.7	-181.9	2.2	-5.7
O/D/U/D(MU)	0.6	2.9	2.9	-12.4	0.2	-5.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6097	12096	7228	2110	993	28524	46
State Sector	7495	13952	9033	2452	155	33086	54
Total	13592	26048	16261	4562	1147	61610	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	752	1426	546	618	15	3356	77
Lignite	28	11	39	0	0	78	2
Hydro	126	44	97	29	11	308	7
Nuclear	26	37	70	0	0	133	3
Gas, Naptha & Diesel	15	6	6	0	24	51	1
RES (Wind, Solar, Biomass & Others)	139	111	191	2	1	443	10
Total	1086	1635	949	649	50	4369	100

Share of RES in total generation (%)	12.77	6.78	20.11	0.31	1.39	10.14
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.77	11.75	37.73	4.81	23.19	20.22

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.019
Based on State Max Demands	1.053

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: 22-Dec-2022

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	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	-	0	348	0.0	8.6	-8.6
3	765 kV	GAYA-VARANASI	2	0	749	0.0	12.6	-12.6
4	765 kV	SASARAM-FATEHPUR	1	0	391	0.0	6.7	-6.7
5	765 kV	GAYA-BALIA	1	0	627	0.0	9.3	-9.3
6	400 kV	PUSAULI-VARANASI	1	0	244	0.0	5.0	-5.0
7	400 kV	PUSAULI -ALLAHABAD	1	0	190	0.0	3.3	-3.3
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	743	0.0	12.3	-12.3
9	400 kV	PATNA-BALIA	2	0	610	0.0	13.1	-13.1
10	400 kV	NAUBATPUR-BALIA	2	0	688	0.0	11.8	-11.8
11	400 kV	BIHARSHARIFF-BALIA	2	0	367	0.0	5.6	-5.6
12	400 kV	MOTIHARI-GORAKHPUR	2	0	576	0.0	10.5	-10.5
13	400 kV	BIHARSHARIFF-VARANASI	2	0	287	0.0	5.2	-5.2
14	220 kV	SAHUPURI-KARAMNASA	1	0	107	0.0	1.2	-1.2
15	132 kV	NAGAR UNTARI-RIHAND	1	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND	1	25	0	0.4	0.0	0.4
17	132 kV	KARMANASA-SAHUPURI	1	0	3	0.0	0.0	0.0
18	132 kV	KARMANASA-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	0.4	105.2	-104.8
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	889	335	2.2	0.0	2.2
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	333	677	0.0	1.4	-1.4
3	765 kV	JHARSUGUDA-DURG	2	0	519	0.0	9.1	-9.1
4	400 kV	JHARSUGUDA-RAIGARH	4	0	559	0.0	9.4	-9.4
5	400 kV	RANCHI-SIPAT	2	46	293	0.0	2.8	-2.8
6	220 kV	BUDHIPADAR-RAIGARH	1	0	164	0.0	2.4	-2.4
7	220 kV	BUDHIPADAR-KORBA	2	29	123	0.0	1.3	-1.3
					ER-WR	2.2	26.3	-24.1
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	100	545	0.0	3.8	-3.8
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1991	0.0	38.6	-38.6
3	765 kV	ANGUL-SRIKAKULAM	2	0	3308	0.0	60.7	-60.7
4	400 kV	TALCHER-I/C	2	157	740	0.0	6.2	-6.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	0	0	0.0	0.0	0.0
					ER-SR	0.0	103.1	-103.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	271	69	2.5	0.1	2.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	322	112	6.0	0.0	6.0
3	220 kV	ALIPURDUAR-SALAKATI	2	34	16	0.5	0.0	0.5
					ER-NER	8.9	0.1	8.8
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	471	0	11.3	0.0	11.3
					NER-NR	11.3	0.0	11.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1524	0.0	36.2	-36.2
2	HVDC	VINDHYACHAL B/B	-	196	0	3.8	0.0	3.8
3	HVDC	MUNDRA-MOHINDERGARH	2	976	0	23.3	0.0	23.3
4	765 kV	GWALIOR-AGRA	2	0	1600	0.0	18.2	-18.2
5	765 kV	GWALIOR-PHAGI	2	0	2071	0.0	31.6	-31.6
6	765 kV	JABALPUR-ORAI	2	0	920	0.0	27.5	-27.5
7	765 kV	GWALIOR-ORAI	1	1130	0	18.8	0.0	18.8
8	765 kV	SATNA-ORAI	1	0	985	0.0	17.6	-17.6
9	765 kV	BANASKANTHA-CHITORGARH	2	1830	325	19.8	0.5	19.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2167	0.0	26.8	-26.8
11	400 kV	ZERDA-KANKROLI	1	288	52	2.6	0.0	2.6
12	400 kV	ZERDA -BHINMAL	1	504	146	2.2	0.0	2.2
13	400 kV	VINDHYACHAL -RIHAND	1	962	0	21.5	0.0	21.5
14	400 kV	RAPP-SHUJALPUR	2	384	367	1.6	2.3	-0.7
15	220 kV	BHANPURA-RANPUR	1	0	0	0.0	0.0	0.0
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	1.7	-1.7
17	220 kV	MEHGAON-AURAIYA	1	139	0	1.3	0.0	1.3
18	220 kV	MALANPUR-AURAIYA	1	105	0	2.0	0.0	2.0
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	97.0	162.4	-65.4
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	987	0	11.4	0.0	11.4
2	HVDC	RAIGARH-PUGALUR	2	1444	2501	2.1	0.0	2.1
3	765 kV	SOLAPUR-RAICHUR	2	831	2759	0.4	23.9	-23.5
4	765 kV	WARDHA-NIZAMABAD	2	0	3663	0.0	54.5	-54.5
5	400 kV	KOLHAPUR-KUDGI	2	1361	0	17.6	0.0	17.6
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	123	2.3	0.0	2.3
					WR-SR	33.7	78.4	-44.7

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 MANGDECHU HEP 4*180MW)	0	0	0	-0.85
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	206	0	123	2.94
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	0	0	0	-1.02
	NER	132kV GELEPHU-SALAKATI	-19	0	-12	-0.28
	NER	132kV MOTANGA-RANGIA	-7	0	0	-0.01
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	-73	0	-57	-1.36
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.00
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	0	0	0	-2.74
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-934	-629	-849	-20.38
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-119	0	-98	-2.34