National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
POWER SYSTEM OPERATION CORPORATION LIMITED
पॉवर 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: 22nd Dec 2020

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 21.12.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-दिसम्बर -2020 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 2020, 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-Dec-2020**

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)	53074	51822	39119	18372	2502	164889
Peak Shortage (MW)	550	0	0	82	25	657
Energy Met (MU)	1033	1201	883	358	41	3517
Hydro Gen (MU)	109	43	64	35	12	263
Wind Gen (MU)	3	52	63	-	-	118
Solar Gen (MU)*	34.66	32.87	95.80	4.56	0.04	168
Energy Shortage (MU)	11.34	0.00	0.00	0.25	0.85	12.44
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	54638	59518	44500	18912	2516	175089
Time Of Maximum Demand Met (From NLDC SCADA)	10:32	10:55	11:01	17:52	18:21	10:32

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	0.034	0.00	0.08	3.61	3.69	72.22	24.09

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	6503	0	125.5	61.5	-2.2	30	0.00
	Haryana	6690	0	134.1	96.7	0.3	205	0.00
	Rajasthan	13760	0	255.9	91.0	2.4	444	0.00
	Delhi	4179	0	68.9	51.6	-0.8	266	0.00
	UP	17923	0	315.3	109.0	0.2	404	0.03
	Uttarakhand	2223	0	41.6	26.1	1.2	213	0.11
	HP	1817	0	32.7	25.7	1.2	431	0.00
	J&K(UT) & Ladakh(UT)	2853	550	55.0	49.4	-0.1	366	11.20
	Chandigarh	250	0	4.0	3.8	0.2	34	0.00
WR	Chhattisgarh	3969	0	84.2	30.1	-0.2	237	0.00
	Gujarat	16524	0	337.2	63.3	3.7	481	0.00
	MP	14959	0	284.4	174.2	-2.1	415	0.00
	Maharashtra	22332	0	444.4	150.6	-1.4	654	0.00
	Goa	503	0	9.7	9.9	-0.2	112	0.00
	DD	330	0	7.2	6.9	0.3	130	0.00
	DNH	778	0	16.4	17.2	-0.8	128	0.00
	AMNSIL	821	0	17.4	9.6	0.3	291	0.00
SR	Andhra Pradesh	8166	0	158.6	79.4	0.2	354	0.00
	Telangana	10033	0	188.1	81.9	-0.1	1290	0.00
	Karnataka	11191	0	205.3	73.4	0.3	510	0.00
	Kerala	3522	0	67.9	51.6	1.1	288	0.00
	Tamil Nadu	12984	0	257.1	156.6	-1.8	455	0.00
	Puducherry	336	0	6.6	7.1	-0.5	34	0.00
ER	Bihar	4991	0	84.6	82.9	0.4	406	0.00
	DVC	3178	0	66.3	-36.1	1.6	365	0.00
	Jharkhand	1431	0	26.7	20.5	-1.1	66	0.25
	Odisha	3791	0	66.9	-0.2	-0.4	363	0.00
	West Bengal	6340	0	112.0	6.8	-0.2	399	0.00
	Sikkim	131	0	2.0	1.8	0.2	44	0.00
NER	Arunachal Pradesh	120	1	2.1	2.2	-0.3	18	0.01
	Assam	1425	10	22.8	18.9	-0.2	113	0.80
	Manipur	228	2	2.8	3.5	-0.7	28	0.02
	Meghalaya	356	2	6.3	4.4	-0.1	76	0.00
	Mizoram	110	1	1.7	1.5	-0.1	26	0.01
	Nagaland	151	1	2.2	2.2	-0.2	22	0.01
	Tripura	218	1	3.4	1.5	-0.2	51	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	7.1	-9.8	-15.3
Day Peak (MW)	337.0	-521.5	-907.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	290.3	-301.7	126.2	-118.9	4.1	0.0
Actual(MU)	283.8	-295.4	118.0	-116.4	3.5	-6.5
O/D/U/D(MU)	-6.6	6.3	-8.1	2.6	-0.7	-6.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	6956	12565	8252	2695	669	31137
State Sector	9711	14971	13107	4932	11	42731
Total	16667	27535	21359	7627	681	73869

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	524	1316	411	465	7	2724
Lignite	19	13	32	0	0	64
Hydro	109	43	64	35	12	263
Nuclear	28	28	59	0	0	116
Gas, Naptha & Diesel	26	32	12	0	23	94
RES (Wind, Solar, Biomass & Others)	67	86	194	5	0	353
Total	774	1519	773	504	43	3613
Share of RES in total generation (%)	8.72	5.68	25.14	0.90	0.09	9.76
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.41	10.38	41.13	7.76	28.41	20.24

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.029
Based on State Max Demands	1.057

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-2020

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	299	0.0	6.4	-6.4
3	765 kV	GAYA-VARANASI	2	0	1090	0.0	14.3	-14.3
4	765 kV	SASARAM-FATEHPUR	1	30	256	0.0	1.8	-1.8
5	765 kV	GAYA-BALIA	1	0	683	0.0	10.1	-10.1
6	400 kV	PUSAULI-VARANASI	1	0	200	0.0	4.0	-4.0
7	400 kV	PUSAULI -ALLAHABAD	1	0	146	0.0	2.2	-2.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	878	0.0	9.5	-9.5
9	400 kV	PATNA-BALIA	4	0	1540	0.0	21.6	-21.6
10	400 kV	BIHARSHARIFF-BALIA	2	0	402	0.0	5.3	-5.3
11	400 kV	MOTIHARI-GORAKHPUR	2	0	356	0.0	5.9	-5.9
12	400 kV	BIHARSHARIFF-VARANASI	2	35	383	0.0	2.9	-2.9
13	220 kV	PUSAULI-SAHUPURI	1	78	37	0.6	0.0	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-CHANDAULI	1	0	0	0.0	0.0	0.0
					ER-NR	1.0	83.9	-82.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	678	613	0.3	0.0	0.3
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	830	90	10.1	0.0	10.1
3	765 kV	JHARSUGUDA-DURG	2	67	434	0.0	4.3	-4.3
4	400 kV	JHARSUGUDA-RAIGARH	4	81	440	0.0	4.1	-4.1
5	400 kV	RANCHI-SIPAT	2	276	83	2.3	0.0	2.3
6	220 kV	BUDHIPADAR-RAIGARH	1	0	125	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	2	44	88	0.0	0.5	-0.5
					ER-WR	12.7	10.7	2.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	488	0.0	9.3	-9.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1971	0.0	27.4	-27.4
3	765 kV	ANGUL-SRIKAKULAM	2	30779	3092	0.0	47.5	-47.5
4	400 kV	TALCHER-I/C	2	1137	137	8.2	0.0	8.2
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	84.2	-84.2
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	229	145	2.4	0.0	2.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	352	195	3.8	0.0	3.8
3	220 kV	ALIPURDUAR-SALAKATI	2	53	44	0.4	0.0	0.4
					ER-NER	6.6	0.0	6.6
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	493	0	10.2	0.0	10.2
					NER-NR	10.2	0.0	10.2
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	2001	0.0	53.0	-53.0
2	HVDC	VINDHYACHAL B/B	-	242	251	0.0	0.2	-0.2
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1742	0.0	42.8	-42.8
4	765 kV	GWALIOR-AGRA	2	0	3312	0.0	52.5	-52.5
5	765 kV	PHAGI-GWALIOR	2	0	1795	0.0	21.9	-21.9
6	765 kV	JABALPUR-ORAI	2	0	1184	0.0	38.6	-38.6
7	765 kV	GWALIOR-ORAI	1	745	0	12.7	0.0	12.7
8	765 kV	SATNA-ORAI	1	0	1500	0.0	29.2	-29.2
9	765 kV	CHITORGARH-BANASKANTHA	2	143	716	0.3	6.0	-5.8
10	400 kV	ZERDA-KANKROLI	1	94	181	0.0	0.7	-0.7
11	400 kV	ZERDA -BHINMAL	1	47	489	0.0	4.9	-4.9
12	400 kV	VINDHYACHAL -RIHAND	1	967	0	22.2	0.0	22.2
13	400 kV	RAPP-SHUJALPUR	2	0	540	0.0	5.8	-5.8
14	220 kV	BHANPURA-RANPUR	1	6	180	0.0	2.0	-2.0
15	220 kV	BHANPURA-MORAK	1	11	0	0.2	0.9	-0.7
16	220 kV	MEHGAON-AURAIYA	1	117	0	0.5	0.1	0.4
17	220 kV	MALANPUR-AURAIYA	1	68	27	1.4	0.0	1.4
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	37.2	258.6	-221.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1016	0.0	11.1	-11.1
2	HVDC	RAIGARH-PUGALUR	2	0	1492	0.0	18.8	-18.8
3	765 kV	SOLAPUR-RAICHUR	2	1196	2815	0.0	23.1	-23.1
4	765 kV	WARDHA-NIZAMABAD	2	0	2953	0.0	35.6	-35.6
5	400 kV	KOLHAPUR-KUDGI	2	1371	0	17.3	0.0	17.3
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	1	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	39	0.7	0.0	0.7
					WR-SR	18.0	88.7	-70.7

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1&2 i.e. ALIPURDUAR RECEIPT (from MANGDECHU HEP 4*180MW)	140	130	130	3.1
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	150	135	150	3.7
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	34	0	15	0.4
	NER	132KV-GEYLEGPHU - SALAKATI	20	0	11	0.3
	NER	132kV Motanga-Rangia	-7	5	-2	0.0
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	-61	0	-56	-1.3
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	-264	-190	-233	-5.6
	ER	132KV-BIHAR - NEPAL	-197	-1	-120	-2.9
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-802	-418	-557	-13.4
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	53	0	-40	-1.0
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	52	0	-40	-1.0