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: 20th 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 19.12.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-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 19th 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:** **20-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)	51950	51324	38903	17415	2517	162109
Peak Shortage (MW)	625	0	0	0	29	654
Energy Met (MU)	1023	1197	891	356	45	3512
Hydro Gen (MU)	112	40	58	33	13	256
Wind Gen (MU)	9	77	81	-	-	168
Solar Gen (MU)*	36.51	32.53	78.87	4.46	1.53	154
Energy Shortage (MU)	12.82	0.00	0.00	0.00	0.80	13.62
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	53310	58733	44645	17942	2609	171638
Time Of Maximum Demand Met (From NLDC SCADA)	09:43	10:40	09:21	17:50	17:56	09:45

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	0.026	0.00	0.00	0.82	0.82	77.77	21.41

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	6504	0	128.6	62.4	-1.4	77	0.00
	Haryana	6719	0	136.8	98.0	1.3	240	0.02
	Rajasthan	13528	0	250.9	81.1	1.6	389	0.00
	Delhi	4106	0	68.1	51.2	-1.3	190	0.00
	UP	17499	0	305.7	100.9	-0.4	609	0.00
	Uttarakhand	2179	0	39.7	25.7	1.6	180	1.55
	HP	1815	0	32.9	26.4	0.8	359	0.05
	J&K(UT) & Ladakh(UT)	2781	550	56.5	48.8	2.7	331	11.20
	Chandigarh	231	0	3.9	3.8	0.1	17	0.00
WR	Chhattisgarh	3804	0	83.0	25.5	-0.3	192	0.00
	Gujarat	16113	0	334.1	62.6	3.9	1064	0.00
	MP	14301	0	273.2	164.7	-0.6	430	0.00
	Maharashtra	22554	0	455.0	152.2	-2.1	662	0.00
	Goa	457	0	9.6	9.5	0.1	32	0.00
	DD	303	0	5.5	5.2	0.3	42	0.00
	DNH	794	0	18.4	18.4	0.0	41	0.00
	AMNSIL	822	0	18.0	10.2	0.2	250	0.00
SR	Andhra Pradesh	8176	0	162.2	78.4	0.9	586	0.00
	Telangana	10002	0	188.3	71.9	-0.5	986	0.00
	Karnataka	11237	0	208.0	74.2	-0.4	584	0.00
	Kerala	3408	0	69.4	55.2	0.7	258	0.00
	Tamil Nadu	12373	0	256.4	159.3	-3.0	472	0.00
	Puducherry	340	0	6.8	7.3	-0.6	16	0.00
ER	Bihar	4583	0	80.7	79.3	-0.1	280	0.00
	DVC	3075	0	66.0	-37.3	0.2	376	0.00
	Jharkhand	1395	0	25.8	20.6	-2.0	65	0.00
	Odisha	3691	0	67.4	-1.2	-0.7	387	0.00
	West Bengal	6140	0	114.2	9.8	0.5	457	0.00
	Sikkim	140	0	2.3	1.9	0.4	47	0.00
NER	Arunachal Pradesh	135	2	2.3	2.2	0.0	20	0.01
	Assam	1431	18	24.0	18.7	1.2	117	0.50
	Manipur	230	2	3.1	3.4	-0.3	56	0.02
	Meghalaya	391	0	6.4	3.3	0.5	65	0.25
	Mizoram	118	1	1.6	1.6	-0.3	48	0.01
	Nagaland	133	2	2.2	1.8	0.2	27	0.01
	Tripura	211	1	5.4	1.6	0.1	21	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	7.0	-8.5	-14.8
Day Peak (MW)	328.0	-118.6	-895.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	274.7	-280.4	130.1	-125.3	0.9	0.0
Actual(MU)	272.2	-272.8	112.0	-121.0	2.1	-7.5
O/D/U/D(MU)	-2.5	7.5	-18.1	4.3	1.2	-7.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	7016	14985	9222	2170	872	34265
State Sector	9711	15513	12917	4772	47	42959
Total	16727	30497	22139	6942	919	77224

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	509	1271	432	465	8	2684
Lignite	19	12	29	0	0	60
Hydro	112	40	58	33	13	256
Nuclear	28	28	62	0	0	118
Gas, Naptha & Diesel	24	27	12	0	24	87
RES (Wind, Solar, Biomass & Others)	76	111	195	4	2	388
Total	769	1488	787	502	47	3593
Share of RES in total generation (%)	9.91	7.45	24.76	0.88	3.25	10.79
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	28.13	12.03	39.99	7.48	31.26	21.21

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.033
Based on State Max Demands	1.059

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: 20-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	7.1	-7.1
3	765 kV	GAYA-VARANASI	2	0	1546	0.0	18.7	-18.7
4	765 kV	SASARAM-FATEHPUR	1	61	354	0.0	3.4	-3.4
5	765 kV	GAYA-BALIA	1	0	649	0.0	5.7	-5.7
6	400 kV	PUSAULI-VARANASI	1	43	238	0.0	4.4	-4.4
7	400 kV	PUSAULI -ALLAHABAD	1	0	172	0.0	2.6	-2.6
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	889	0.0	10.8	-10.8
9	400 kV	PATNA-BALIA	4	0	1388	0.0	21.1	-21.1
10	400 kV	BIHARSHARIFF-BALIA	2	0	524	0.0	7.2	-7.2
11	400 kV	MOTIHARI-GORAKHPUR	2	0	380	0.0	6.6	-6.6
12	400 kV	BIHARSHARIFF-VARANASI	2	48	428	0.0	2.2	-2.2
13	220 kV	PUSAULI-SAHUPURI	1	59	45	0.4	0.0	0.4
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	0.8	89.7	-88.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	421	937	0.0	3.7	-3.7
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	886	343	6.6	0.0	6.6
3	765 kV	JHARSUGUDA-DURG	2	0	371	0.0	4.8	-4.8
4	400 kV	JHARSUGUDA-RAIGARH	4	140	506	0.0	5.0	-5.0
5	400 kV	RANCHI-SIPAT	2	276	228	2.4	0.0	2.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	155	0.0	2.1	-2.1
7	220 kV	BUDHIPADAR-KORBA	2	86	105	0.0	0.4	-0.4
					ER-WR	9.0	15.9	-7.0
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	440	0.0	7.3	-7.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	16	1641	0.0	11.8	-11.8
3	765 kV	ANGUL-SRIKAKULAM	2	0	2801	0.0	50.5	-50.5
4	400 kV	TALCHER-I/C	2	1431	915	18.9	0.0	18.9
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	69.6	-69.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	238	96	2.3	0.0	2.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	384	131	3.7	0.0	3.7
3	220 kV	ALIPURDUAR-SALAKATI	2	64	25	0.5	0.0	0.5
					ER-NER	6.4	0.0	6.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	486	0	8.9	0.0	8.9
					NER-NR	8.9	0.0	8.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1506	0.0	36.3	-36.3
2	HVDC	VINDHYACHAL B/B	-	48	53	0.4	0.8	-0.5
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1927	0.0	39.6	-39.6
4	765 kV	GWALIOR-AGRA	2	0	2699	0.0	45.9	-45.9
5	765 kV	PHAGI-GWALIOR	2	0	1481	0.0	19.9	-19.9
6	765 kV	JABALPUR-ORAI	2	0	1206	0.0	38.8	-38.8
7	765 kV	GWALIOR-ORAI	1	787	0	13.1	0.0	13.1
8	765 kV	SATNA-ORAI	1	0	1396	0.0	26.3	-26.3
9	765 kV	CHITORGARH-BANASKANTHA	2	164	1098	0.0	10.5	-10.5
10	400 kV	ZERDA-KANKROLI	1	55	179	0.0	0.9	-0.9
11	400 kV	ZERDA -BHINMAL	1	0	407	0.0	4.3	-4.3
12	400 kV	VINDHYACHAL -RIHAND	1	874	0	12.6	0.0	12.6
13	400 kV	RAPP-SHUJALPUR	2	38	540	0.0	4.6	-4.5
14	220 kV	BHANPURA-RANPUR	1	0	181	0.0	2.2	-2.2
15	220 kV	BHANPURA-MORAK	1	11	0	0.1	1.1	-1.0
16	220 kV	MEHGAON-AURAIYA	1	122	0	0.7	0.0	0.7
17	220 kV	MALANPUR-AURAIYA	1	74	22	1.6	0.0	1.6
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	28.5	231.2	-202.8
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1016	0.0	19.7	-19.7
2	HVDC	RAIGARH-PUGALUR	2	0	1244	0.0	31.3	-31.3
3	765 kV	SOLAPUR-RAICHUR	2	917	2081	0.0	19.8	-19.8
4	765 kV	WARDHA-NIZAMABAD	2	125	2203	0.0	24.6	-24.6
5	400 kV	KOLHAPUR-KUDGI	2	1299	0	17.7	0.0	17.7
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	40	0.8	0.0	0.8
					WR-SR	18.5	95.5	-77.0

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	133	134	3.2
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	169	137	148	3.6
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	31	0	10	0.2
	NER	132KV-GEYLEGPHU - SALAKATI	-22	-5	12	0.3
	NER	132kV Motanga-Rangia	11	0	-3	-0.1
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	-61	0	-55	-1.3
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	262	162	-222	-5.3
	ER	132KV-BIHAR - NEPAL	-204	-1	-75	-1.8
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-792	-308	-536	-12.9
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	52	0	-40	-1.0
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	51	0	-40	-1.0