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: 21st 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 20.12.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-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 20th 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: 21-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)	49768	49013	35191	17425	2449	153846
Peak Shortage (MW)	550	0	0	0	22	572
Energy Met (MU)	1004	1171	837	346	41	3398
Hydro Gen (MU)	108	36	49	30	12	235
Wind Gen (MU)	8	68	71	-	-	147
Solar Gen (MU)*	31.82	31.70	79.90	4.69	0.03	148
Energy Shortage (MU)	11.21	0.00	0.00	0.00	1.30	12.51
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	52123	57396	42225	18362	2451	166632
Time Of Maximum Demand Met (From NLDC SCADA)	10:48	10:41	09:43	18:33	18:04	10:33

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	0.032	0.00	0.01	1.74	1.75	69.68	28.58

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	6404	0	126.4	64.1	-1.9	57	0.00
	Haryana	6219	0	124.9	91.0	0.3	152	0.00
	Rajasthan	13396	0	252.0	88.3	1.0	349	0.00
	Delhi	4023	0	64.2	49.2	-2.1	239	0.00
	UP	17352	0	309.6	98.2	0.6	458	0.01
	Uttarakhand	2049	0	38.5	26.2	-0.2	89	0.00
	HP	1712	0	30.9	24.7	0.2	270	0.00
	J&K(UT) & Ladakh(UT)	2749	550	54.3	49.6	0.0	330	11.20
	Chandigarh	211	0	3.6	3.5	0.1	27	0.00
WR	Chhattisgarh	3819	0	83.1	28.9	-0.3	351	0.00
	Gujarat	15625	0	323.2	69.6	1.2	688	0.00
	MP	14494	0	277.0	166.6	-1.8	458	0.00
	Maharashtra	21511	0	435.3	147.8	-1.4	663	0.00
	Goa	455	0	9.3	9.0	0.2	52	0.00
	DD	300	0	6.2	6.1	0.2	24	0.00
	DNH	773	0	18.1	18.1	-0.1	49	0.00
	AMNSIL	834	0	18.5	10.2	0.7	291	0.00
SR	Andhra Pradesh	7883	0	154.8	75.8	0.2	431	0.00
	Telangana	9632	0	184.2	76.2	-0.5	843	0.00
	Karnataka	10624	0	192.5	66.9	0.1	1040	0.00
	Kerala	3198	0	62.6	52.8	0.9	287	0.00
	Tamil Nadu	11085	0	236.4	147.0	-3.3	390	0.00
	Puducherry	293	0	6.1	6.7	-0.6	9	0.00
ER	Bihar	4903	0	81.7	81.0	-0.4	444	0.00
	DVC	3157	0	64.9	-34.9	0.9	561	0.00
	Jharkhand	1467	0	26.0	20.8	-1.9	34	0.00
	Odisha	3898	0	66.5	-2.0	-0.6	347	0.00
	West Bengal	5722	0	105.3	2.9	0.8	542	0.00
	Sikkim	124	0	2.0	1.7	0.3	35	0.00
NER	Arunachal Pradesh	116	2	2.2	2.1	-0.1	23	0.01
	Assam	1345	16	22.0	17.9	-0.2	103	1.00
	Manipur	222	2	2.7	3.4	-0.7	23	0.02
	Meghalaya	366	2	6.8	4.5	0.2	45	0.25
	Mizoram	118	0	1.7	1.5	-0.2	21	0.01
	Nagaland	132	1	2.2	1.8	0.2	26	0.01
	Tripura	224	1	3.3	1.5	-0.2	45	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	6.9	-9.6	-15.2
Day Peak (MW)	306.0	-550.0	-910.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	270.0	-260.6	116.1	-128.1	2.7	0.0
Actual(MU)	263.8	-249.0	97.4	-122.5	3.4	-7.0
O/D/U/D(MU)	-6.2	11.6	-18.7	5.6	0.7	-7.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	7016	13825	8722	2170	902	32635
State Sector	10236	16081	12917	5232	11	44476
Total	17252	29905	21639	7402	913	77111

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	513	1233	406	462	6	2621
Lignite	19	12	32	0	0	63
Hydro	108	36	49	30	12	235
Nuclear	28	29	59	0	0	116
Gas, Naptha & Diesel	24	24	12	0	24	84
RES (Wind, Solar, Biomass & Others)	69	101	187	5	0	361
Total	762	1434	745	497	42	3480

Share of RES in total generation (%)	9.02	7.02	25.12	0.94	0.07	10.38
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	26.95	11.51	39.56	6.99	29.02	20.46

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.036
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: 21-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	7.5	-7.5
3	765 kV	GAYA-VARANASI	2	0	1213	0.0	17.1	-17.1
4	765 kV	SASARAM-FATEHPUR	1	53	337	0.0	3.5	-3.5
5	765 kV	GAYA-BALIA	1	0	644	0.0	10.8	-10.8
6	400 kV	PUSAULI-VARANASI	1	0	221	0.0	4.4	-4.4
7	400 kV	PUSAULI -ALLAHABAD	1	0	157	0.0	2.9	-2.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	884	0.0	10.5	-10.5
9	400 kV	PATNA-BALIA	4	0	1337	0.0	19.5	-19.5
10	400 kV	BIHARSHARIFF-BALIA	2	0	374	0.0	5.5	-5.5
11	400 kV	MOTIHARI-GORAKHPUR	2	0	385	0.0	6.6	-6.6
12	400 kV	BIHARSHARIFF-VARANASI	2	46	418	0.0	3.4	-3.4
13	220 kV	PUSAULI-SAHUPURI	1	57	64	0.2	0.0	0.2
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	0.6	91.7	-91.1
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	276	1219	0.0	9.6	-9.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	889	353	5.5	0.0	5.5
3	765 kV	JHARSUGUDA-DURG	2	17	417	0.0	5.9	-5.9
4	400 kV	JHARSUGUDA-RAIGARH	4	37	634	0.0	8.0	-8.0
5	400 kV	RANCHI-SIPAT	2	280	188	1.4	0.0	1.4
6	220 kV	BUDHIPADAR-RAIGARH	1	0	178	0.0	2.5	-2.5
7	220 kV	BUDHIPADAR-KORBA	2	57	148	0.0	1.4	-1.4
					ER-WR	6.8	27.4	-20.5
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	335	0.0	5.3	-5.3
2	HVDC	TALCHER-KOLAR BIPOLE	2	16	1630	0.0	3.5	-3.5
3	765 kV	ANGUL-SRIKAKULAM	2	30384	2848	0.0	49.5	-49.5
4	400 kV	TALCHER-I/C	2	1825	300	31.1	0.0	31.1
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	58.3	-58.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	195	55	2.0	0.0	2.0
2	400 kV	ALIPURDUAR-BONGAIGAON	2	319	56	2.9	0.0	2.9
3	220 kV	ALIPURDUAR-SALAKATI	2	49	19	0.3	0.0	0.3
					ER-NER	5.2	0.0	5.2
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	488	0	9.3	0.0	9.3
					NER-NR	9.3	0.0	9.3
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1503	0.0	40.2	-40.2
2	HVDC	VINDHYACHAL B/B	-	242	0	5.0	0.0	5.0
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1742	0.0	43.5	-43.5
4	765 kV	GWALIOR-AGRA	2	0	2742	0.0	45.4	-45.4
5	765 kV	PHAGI-GWALIOR	2	0	1475	0.0	22.7	-22.7
6	765 kV	JABALPUR-ORAI	2	0	1115	0.0	38.6	-38.6
7	765 kV	GWALIOR-ORAI	1	839	0	13.8	0.0	13.8
8	765 kV	SATNA-ORAI	1	0	1364	0.0	26.9	-26.9
9	765 kV	CHITORGARH-BANASKANTHA	2	371	766	0.4	7.6	-7.2
10	400 kV	ZERDA-KANKROLI	1	76	129	0.0	0.6	-0.6
11	400 kV	ZERDA -BHINMAL	1	0	346	0.0	4.2	-4.2
12	400 kV	VINDHYACHAL -RIHAND	1	966	0	22.1	0.0	22.1
13	400 kV	RAPP-SHUJALPUR	2	42	518	0.0	5.4	-5.4
14	220 kV	BHANPURA-RANPUR	1	2	185	0.0	2.1	-2.1
15	220 kV	BHANPURA-MORAK	1	11	0	0.2	1.0	-0.9
16	220 kV	MEHGAON-AURAIYA	1	124	0	0.7	0.0	0.7
17	220 kV	MALANPUR-AURAIYA	1	74	19	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	43.7	238.2	-194.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1016	0.0	15.2	-15.2
2	HVDC	RAIGARH-PUGALUR	2	0	998	0.0	29.9	-29.9
3	765 kV	SOLAPUR-RAICHUR	2	1156	2235	0.0	18.5	-18.5
4	765 kV	WARDHA-NIZAMABAD	2	115	2367	0.0	28.3	-28.3
5	400 kV	KOLHAPUR-KUDGI	2	1344	0	16.1	0.0	16.1
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	38	0.7	0.0	0.7
					WR-SR	16.8	91.9	-75.1

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)	130	0	128	3.1
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	156	154	154	3.7
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	30	0	4	0.1
	NER	132KV-GEYLEGPHU - SALAKATI	-23	-5	13	0.3
	NER	132kV Motanga-Rangia	13	1	-7	-0.2
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	-62	0	-56	-1.4
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	-262	-180	-234	-5.6
	ER	132KV-BIHAR - NEPAL	-226	-1	-110	-2.6
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-804	-416	-549	-13.2
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	53	0	-41	-1.0
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	53	0	-41	-1.0