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: 22th Nov 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 21.11.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 21-नवंबर-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 21th November 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-Nov-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)	43170	49756	38945	17650	2460	151981
Peak Shortage (MW)	540	0	0	0	54	594
Energy Met (MU)	861	1164	855	349	42	3271
Hydro Gen (MU)	109	36	85	46	16	292
Wind Gen (MU)	4	68	28	-	-	100
Solar Gen (MU)*	36.98	29.84	109.01	4.32	0.06	180
Energy Shortage (MU)	1.7	0.0	0.0	0.0	0.8	2.5
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	44086	54176	40764	17910	2532	154909
Time Of Maximum Demand Met (From NLDC SCADA)	09:28	10:41	18:29	18:27	17:19	18:26

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	0.00	5.61	5.61	78.04	16.34

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	5357	0	101.4	85.2	-1.0	137	1.7
	Haryana	5680	135	111.8	109.0	1.1	291	0.0
	Rajasthan	12445	0	233.6	83.0	0.3	398	0.0
	Delhi	3302	0	59.0	41.2	1.4	228	0.0
	UP	13659	0	237.4	91.7	-2.2	278	0.0
	Uttarakhand	1815	0	35.1	26.9	0.8	163	0.0
	HP	1606	0	29.8	23.2	-0.4	64	0.0
	J&K(UT) & Ladakh(UT)	2433	0	50.2	45.4	-0.7	202	0.0
	Chandigarh	178	0	3.1	3.0	0.1	20	0.0
WR	Chhattisgarh	3346	0	71.8	15.7	-0.9	196	0.0
	Gujarat	14585	0	312.9	48.4	1.9	374	0.0
	MP	13724	0	271.9	174.4	-3.6	557	0.0
	Maharashtra	21557	0	452.5	161.5	-2.1	697	0.0
	Goa	531	0	10.8	10.4	-0.1	75	0.0
	DD	329	0	7.2	7.1	0.1	12	0.0
	DNH	792	0	18.1	18.1	0.0	37	0.0
	AMNSIL	855	0	18.6	1.2	0.3	249	0.0
SR	Andhra Pradesh	7933	0	170.0	91.0	1.0	696	0.0
	Telangana	7119	0	149.0	49.3	-0.3	437	0.0
	Karnataka	10052	0	189.9	64.4	0.4	714	0.0
	Kerala	3555	0	71.4	54.9	0.5	219	0.0
	Tamil Nadu	13004	0	267.1	180.1	0.3	648	0.0
	Puducherry	354	0	7.3	7.5	-0.2	20	0.0
ER	Bihar	4104	0	69.2	71.2	-2.5	410	0.0
	DVC	3082	0	62.8	-49.7	-1.0	286	0.0
	Jharkhand	1347	0	24.1	18.4	-2.5	188	0.0
	Odisha	3912	0	74.4	15.0	-0.9	336	0.0
	West Bengal	6196	0	116.8	33.4	-0.4	436	0.0
	Sikkim	113	0	1.6	1.6	-0.1	33	0.0
NER	Arunachal Pradesh	120	2	2.0	2.3	-0.3	20	0.0
	Assam	1469	7	24.5	20.0	0.4	129	0.8
	Manipur	212	2	2.5	2.9	-0.4	25	0.0
	Meghalaya	350	0	6.1	3.0	0.2	46	0.0
	Mizoram	99	1	1.7	1.1	0.2	27	0.0
	Nagaland	123	1	2.0	1.8	0.0	18	0.0
	Tripura	216	2	3.5	2.7	-0.5	35	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	12.8	-0.6	-13.9
Day Peak (MW)	684.0	-234.4	-767.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	296.0	-329.9	137.6	-102.1	-1.8	0.0
Actual(MU)	287.1	-324.7	142.7	-112.2	-1.3	-8.2
O/D/U/D(MU)	-8.9	5.2	5.1	-10.1	0.5	-8.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	7510	12923	10182	3350	872	34837
State Sector	18301	16387	14706	5772	11	55177
Total	25811	29310	24888	9122	883	90013

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	352	1281	344	425	7	2410
Lignite	21	13	32	0	0	66
Hydro	109	36	85	46	16	292
Nuclear	28	33	70	0	0	131
Gas, Naptha & Diesel	21	43	14	0	25	103
RES (Wind, Solar, Biomass & Others)	60	98	176	4	0	339
Total	591	1504	721	476	49	3341

Share of RES in total generation (%)	10.14	6.55	24.41	0.91	0.12	10.14
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	33.34	11.11	45.86	10.54	33.94	22.80

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.029
Based on State Max Demands	1.069

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-Nov-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	500	0.0	2.6	-2.6
2	HVDC	PUSAULI B/B	-	0	297	0.0	7.2	-7.2
3	765 kV	GAYA-VARANASI	2	0	970	0.0	12.1	-12.1
4	765 kV	SASARAM-FATEHPUR	1	37	392	0.0	4.2	-4.2
5	765 kV	GAYA-BALIA	1	0	507	0.0	8.3	-8.3
6	400 kV	PUSAULI-VARANASI	1	0	226	0.0	4.7	-4.7
7	400 kV	PUSAULI -ALLAHABAD	1	0	129	0.0	2.2	-2.2
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	757	0.0	7.8	-7.8
9	400 kV	PATNA-BALIA	4	0	986	0.0	13.2	-13.2
10	400 kV	BIHARSHARIFF-BALIA	2	0	411	0.0	4.5	-4.5
11	400 kV	MOTIHARI-GORAKHPUR	2	0	290	0.0	4.7	-4.7
12	400 kV	BIHARSHARIFF-VARANASI	2	66	343	0.0	1.8	-1.8
13	220 kV	PUSAULI-SAHUPURI	1	20	97	0.0	0.8	-0.8
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	1	20	0	0.3	0.0	0.3
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	0.3	74.0	-73.7
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	914	453	10.4	0.0	10.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	1021	0	13.2	0.0	13.2
3	765 kV	JHARSUGUDA-DURG	2	266	64	1.7	0.0	1.7
4	400 kV	JHARSUGUDA-RAIGARH	4	392	0	5.5	0.0	5.5
5	400 kV	RANCHI-SIPAT	2	347	0	5.5	0.0	5.5
6	220 kV	BUDHIPADAR-RAIGARH	1	51	63	0.0	0.0	0.0
7	220 kV	BUDHIPADAR-KORBA	2	165	0	2.3	0.0	2.3
					ER-WR	38.6	0.0	38.6
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	538	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	2494	0.0	47.1	-47.1
3	765 kV	ANGUL-SRIKAKULAM	2	0	2649	0.0	49.1	-49.1
4	400 kV	TALCHER-I/C	2	0	1145	0.0	13.4	-13.4
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	108.6	-108.6
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	6	333	0.0	3.3	-3.3
2	400 kV	ALIPURDUAR-BONGAIGAON	2	36	408	0.0	4.5	-4.5
3	220 kV	ALIPURDUAR-SALAKATI	2	0	80	0.0	0.9	-0.9
					ER-NER	0.0	8.7	-8.7
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	504	0.0	10.9	-10.9
					NER-NR	0.0	10.9	-10.9
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1808	0.0	35.5	-35.5
2	HVDC	VINDHYACHAL B/B	-	452	0	8.6	0.0	8.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1919	0.0	33.5	-33.5
4	765 kV	GWALIOR-AGRA	2	0	2879	0.0	55.5	-55.5
5	765 kV	PHAGI-GWALIOR	2	0	1875	0.0	28.3	-28.3
6	765 kV	JABALPUR-ORAI	2	0	1150	0.0	41.5	-41.5
7	765 kV	GWALIOR-ORAI	1	668	0	10.4	0.0	10.4
8	765 kV	SATNA-ORAI	1	0	1564	0.0	32.9	-32.9
9	765 kV	CHITORGARH-BANASKANTHA	2	0	1078	0.0	13.8	-13.8
10	400 kV	ZERDA-KANKROLI	1	0	216	0.0	2.0	-2.0
11	400 kV	ZERDA -BHINMAL	1	0	521	0.0	6.5	-6.5
12	400 kV	VINDHYACHAL -RIHAND	1	972	0	22.4	0.0	22.4
13	400 kV	RAPP-SHUJALPUR	2	0	450	0.0	5.4	-5.4
14	220 kV	BHANPURA-RANPUR	1	0	150	0.0	1.8	-1.8
15	220 kV	BHANPURA-MORAK	1	11	0	0.1	0.5	-0.4
16	220 kV	MEHGAON-AURAIYA	1	89	15	0.2	0.3	-0.1
17	220 kV	MALANPUR-AURAIYA	1	53	31	0.5	0.1	0.4
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	42.2	257.5	-215.3
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1009	0.0	20.6	-20.6
2	HVDC	RAIGARH-PUGALUR	2	0	1500	0.0	9.7	-9.7
3	765 kV	SOLAPUR-RAICHUR	2	1361	2584	0.0	24.9	-24.9
4	765 kV	WARDHA-NIZAMABAD	2	590	1982	0.0	23.7	-23.7
5	400 kV	KOLHAPUR-KUDGI	2	862	0	8.4	0.0	8.4
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	43	0.8	0.0	0.8
					WR-SR	9.3	78.9	-69.7

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)	283	0	175	4.2
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	292	281	292	7.3
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	65	0	23	0.6
	NER	132KV-GEYLEGPHU - SALAKATI	10	2	-4	-0.1
	NER	132kV Motanga-Rangia	34	19	-28	-0.7
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	-25	0	-2	0.0
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	-88	26	-7	-0.2
	ER	132KV-BIHAR - NEPAL	-121	-1	-17	-0.4
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-661	-416	-488	-11.7
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	53	0	-45	-1.1
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	53	0	-45	-1.1