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: 24th 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 23.11.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-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 23rd 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:** **24-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)	43622	48907	38810	16484	2406	150229
Peak Shortage (MW)	928	0	0	0	5	933
Energy Met (MU)	868	1173	859	331	41	3273
Hydro Gen (MU)	108	28	96	44	14	291
Wind Gen (MU)	5	22	26	-	-	53
Solar Gen (MU)*	32.72	30.89	80.31	4.41	0.11	148
Energy Shortage (MU)	5.1	0.0	0.0	0.0	0.0	5.1
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	44755	57008	41749	17300	2491	158101
Time Of Maximum Demand Met (From NLDC SCADA)	10:14	10:36	12:30	17:51	17:32	10:36

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	0.042	0.00	0.29	10.09	10.38	75.84	13.77

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	5020	38	99.6	82.6	0.7	180	2.9
	Haryana	5775	238	113.3	110.0	1.5	285	2.0
	Rajasthan	12471	0	233.8	75.9	1.2	446	0.0
	Delhi	3535	0	62.0	43.9	0.5	181	0.0
	UP	13704	240	240.5	85.5	-1.3	291	0.0
	Uttarakhand	1904	0	35.6	27.9	0.3	181	0.2
	HP	1659	40	29.7	22.4	0.0	256	0.0
	J&K(UT) & Ladakh(UT)	2545	0	50.5	42.7	1.2	547	0.0
	Chandigarh	199	0	3.3	3.1	0.2	39	0.0
WR	Chhattisgarh	3416	0	72.8	16.2	-0.2	307	0.0
	Gujarat	15831	0	330.9	63.3	6.4	768	0.0
	MP	14012	0	273.3	175.0	-2.3	729	0.0
	Maharashtra	20931	0	442.3	157.0	-0.9	860	0.0
	Goa	501	0	10.2	9.7	-0.1	46	0.0
	DD	329	0	6.8	6.8	0.0	45	0.0
	DNH	792	0	18.2	17.8	0.4	79	0.0
	AMNSIL	829	0	18.3	1.2	0.3	231	0.0
SR	Andhra Pradesh	8150	0	170.4	89.5	0.7	504	0.0
	Telangana	7173	0	147.1	49.7	-1.2	305	0.0
	Karnataka	10388	0	195.2	66.5	0.6	661	0.0
	Kerala	3552	0	69.4	52.8	0.2	253	0.0
	Tamil Nadu	13383	0	270.2	187.4	2.7	562	0.0
	Puducherry	342	0	6.8	7.3	-0.4	46	0.0
ER	Bihar	4208	0	71.1	69.8	0.3	310	0.0
	DVC	3065	0	63.8	-49.1	-0.8	205	0.0
	Jharkhand	1394	0	24.3	17.8	-1.4	180	0.0
	Odisha	3629	0	70.0	9.1	-1.5	170	0.0
	West Bengal	5958	0	100.7	23.9	-0.4	235	0.0
	Sikkim	112	0	1.5	1.7	-0.2	25	0.0
NER	Arunachal Pradesh	118	1	2.1	2.0	0.2	24	0.0
	Assam	1405	14	23.3	18.8	0.3	81	0.0
	Manipur	216	1	2.8	2.9	-0.1	42	0.0
	Meghalaya	356	0	6.1	2.9	0.1	50	0.0
	Mizoram	105	0	1.6	1.2	-0.1	41	0.0
	Nagaland	120	2	2.2	1.7	0.2	20	0.0
	Tripura	244	4	3.4	2.2	-0.5	43	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	12.2	-2.5	-15.8
Day Peak (MW)	491.0	-294.3	-830.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	286.6	-324.1	152.0	-116.6	2.2	0.0
Actual(MU)	281.2	-320.6	155.6	-121.5	1.2	-4.2
O/D/U/D(MU)	-5.4	3.5	3.6	-4.9	-1.0	-4.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	7300	13073	10572	3100	1022	35067
State Sector	17556	16545	14226	6092	11	54429
Total	24856	29617	24798	9192	1033	89496

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	376	1324	368	423	7	2499
Lignite	20	11	29	0	0	59
Hydro	108	28	96	44	14	291
Nuclear	28	33	65	0	0	126
Gas, Naptha & Diesel	21	57	15	0	23	116
RES (Wind, Solar, Biomass & Others)	58	54	142	4	0	258
Total	610	1507	715	472	45	3348
Share of RES in total generation (%)	9.50	3.56	19.87	0.94	0.25	7.71
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.81	7.61	42.35	10.33	32.14	20.14

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: 24-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	450	0.0	10.8	-10.8
2	HVDC	PUSAULI B/B	-	0	299	0.0	7.3	-7.3
3	765 kV	GAYA-VARANASI	2	0	841	0.0	11.1	-11.1
4	765 kV	SASARAM-FATEHPUR	1	55	220	0.0	1.4	-1.4
5	765 kV	GAYA-BALIA	1	0	561	0.0	9.2	-9.2
6	400 kV	PUSAULI-VARANASI	1	0	245	0.0	5.2	-5.2
7	400 kV	PUSAULI -ALLAHABAD	1	0	118	0.0	1.9	-1.9
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	684	0.0	5.7	-5.7
9	400 kV	PATNA-BALIA	4	0	1140	0.0	14.2	-14.2
10	400 kV	BIHARSHARIFF-BALIA	2	0	524	0.0	6.2	-6.2
11	400 kV	MOTIHARI-GORAKHPUR	2	0	325	0.0	4.7	-4.7
12	400 kV	BIHARSHARIFF-VARANASI	2	71	212	0.0	0.0	0.0
13	220 kV	PUSAULI-SAHUPURI	1	45	55	0.1	0.0	0.1
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	5	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDAULI	1	0	1	0.0	0.0	0.0
					ER-NR	0.5	77.7	-77.2
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	870	725	5.0	0.0	5.0
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	783	57	11.2	0.0	11.2
3	765 kV	JHARSUGUDA-DURG	2	128	259	0.0	0.5	-0.5
4	400 kV	JHARSUGUDA-RAIGARH	4	406	0	5.7	0.0	5.7
5	400 kV	RANCHI-SIPAT	2	296	0	4.6	0.0	4.6
6	220 kV	BUDHIPADAR-RAIGARH	1	39	71	0.0	0.4	-0.4
7	220 kV	BUDHIPADAR-KORBA	2	175	0	2.3	0.0	2.3
					ER-WR	28.7	0.9	27.8
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	537	0.0	12.4	-12.4
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	2001	0.0	39.4	-39.4
3	765 kV	ANGUL-SRIKAKULAM	2	0	2674	0.0	49.5	-49.5
4	400 kV	TALCHER-I/C	2	0	748	0.0	6.6	-6.6
5	220 kV	BALIMELA-UPPER-SILERRU	1	1	0	0.0	0.0	0.0
					ER-SR	0.0	101.3	-101.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	358	0.0	5.2	-5.2
2	400 kV	ALIPURDUAR-BONGAIGAON	2	0	334	0.0	4.1	-4.1
3	220 kV	ALIPURDUAR-SALAKATI	2	0	81	0.0	1.2	-1.2
					ER-NER	0.0	10.5	-10.5
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	504	0.0	9.5	-9.5
					NER-NR	0.0	9.5	-9.5
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1756	0.0	42.7	-42.7
2	HVDC	VINDHYACHAL B/B	-	454	29	7.6	0.0	7.6
3	HVDC	MUNDRA-MOHINDERGARH	2	0	1737	0.0	34.8	-34.8
4	765 kV	GWALIOR-AGRA	2	0	2945	0.0	52.1	-52.1
5	765 kV	PHAGI-GWALIOR	2	0	2030	0.0	25.1	-25.1
6	765 kV	JABALPUR-ORAI	2	0	1169	0.0	41.3	-41.3
7	765 kV	GWALIOR-ORAI	1	695	0	9.1	0.0	9.1
8	765 kV	SATNA-ORAI	1	0	1486	0.0	31.2	-31.2
9	765 kV	CHITORGARH-BANASKANTHA	2	92	639	0.0	4.3	-4.3
10	400 kV	ZERDA-KANKROLI	1	79	125	0.0	0.4	-0.4
11	400 kV	ZERDA -BHINMAL	1	0	411	0.0	4.5	-4.5
12	400 kV	VINDHYACHAL -RIHAND	1	981	0	22.5	0.0	22.5
13	400 kV	RAPP-SHUJALPUR	2	12	506	0.0	4.5	-4.5
14	220 kV	BHANPURA-RANPUR	1	0	151	0.0	1.8	-1.8
15	220 kV	BHANPURA-MORAK	1	11	0	0.2	0.4	-0.2
16	220 kV	MEHGAON-AURAIYA	1	84	12	0.2	0.2	-0.1
17	220 kV	MALANPUR-AURAIYA	1	49	31	0.5	0.0	0.5
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	40.1	243.3	-203.2
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	1009	0.0	14.7	-14.7
2	HVDC	RAIGARH-PUGALUR	2	0	999	0.0	15.9	-15.9
3	765 kV	SOLAPUR-RAICHUR	2	300	2832	0.0	33.6	-33.6
4	765 kV	WARDHA-NIZAMABAD	2	65	2188	0.0	29.8	-29.8
5	400 kV	KOLHAPUR-KUDGI	2	488	169	4.3	0.0	4.3
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	44	0.8	0.0	0.8
					WR-SR	5.1	94.0	-88.9

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)	180	0	173	4.2
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	292	284	292	7.3
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	54	0	12	0.3
	NER	132KV-GEYLEGPHU - SALAKATI	-11	-2	-3	-0.1
	NER	132kV Motanga-Rangia	-24	-11	-17	-0.4
NEPAL	NR	132KV-TANAKPUR(NH) - MAHENDRANAGAR(PG)	0	0	0	0.0
	ER	400KV-MUZAFFARPUR - DHALKEBAR DC	-164	-2	-79	-1.9
	ER	132KV-BIHAR - NEPAL	-130	-1	-27	-0.6
BANGLADESH	ER	BHERAMARA HVDC(BANGLADESH)	-724	-412	-573	-13.7
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	53	0	-43	-1.0
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	53	0	-43	-1.0