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 Nov 2021

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 19.11.2021.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-नवंबर-2021 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 November 2021, 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-Nov-2021**

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)	44943	53346	36529	18892	2467	156177
Peak Shortage (MW)	200	0	0	243	0	443
Energy Met (MU)	921	1213	768	380	45	3328
Hydro Gen (MU)	124	30	92	55	14	314
Wind Gen (MU)	17	56	93	-	-	166
Solar Gen (MU)*	51.63	20.02	41.87	5.23	0.30	119
Energy Shortage (MU)	4.76	0.00	0.00	2.51	0.00	7.27
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	46825	56256	37977	19180	2605	160550
Time Of Maximum Demand Met (From NLDC SCADA)	18:17	11:00	18:19	18:29	17:17	18:19

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	0.041	0.00	0.32	4.65	4.98	68.07	26.95

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	5772	0	110.5	51.2	-1.3	101	0.60
	Haryana	5951	0	118.3	92.0	-0.1	129	0.00
	Rajasthan	12158	0	229.5	44.4	-2.7	317	0.00
	Delhi	3584	0	61.8	47.1	-1.4	171	0.00
	UP	14953	0	276.4	118.0	0.5	359	0.71
	Uttarakhand	1851	0	35.5	23.5	0.8	171	0.00
	HP	1769	0	31.5	21.4	0.4	335	0.00
	J&K(UT) & Ladakh(UT)	2636	250	54.8	48.6	-0.2	276	3.45
	Chandigarh	172	0	3.0	3.4	-0.4	28	0.00
WR	Chhattisgarh	3626	0	79.0	26.3	0.6	299	0.00
	Gujarat	14977	0	323.8	193.8	0.8	631	0.00
	MP	13140	0	261.4	171.7	-2.1	665	0.00
	Maharashtra	22734	0	489.5	166.6	-6.0	611	0.00
	Goa	622	0	13.1	12.7	-0.2	33	0.00
	DD	345	0	7.7	7.4	0.3	28	0.00
	DNH	829	0	19.4	19.6	-0.2	42	0.00
	AMNSIL	892	0	19.5	9.3	0.1	292	0.00
SR	Andhra Pradesh	7108	0	141.1	56.3	-1.2	606	0.00
	Telangana	7084	0	147.3	53.3	-0.5	569	0.00
	Karnataka	7722	0	146.6	39.0	-1.5	597	0.00
	Kerala	3461	0	71.9	31.3	-1.1	170	0.00
	Tamil Nadu	12827	0	254.8	117.0	-2.0	588	0.00
	Puducherry	341	0	6.7	7.3	-0.6	23	0.00
ER	Bihar	4153	0	73.1	67.5	-0.2	294	0.23
	DVC	3180	120	64.2	-29.4	-1.9	347	1.02
	Jharkhand	1446	65	27.3	20.6	0.1	254	1.27
	Odisha	5145	0	99.4	39.4	-0.2	410	0.00
	West Bengal	6407	0	114.9	-2.2	1.1	432	0.00
	Sikkim	103	0	1.6	1.7	-0.1	23	0.00
NER	Arunachal Pradesh	130	0	2.2	2.1	-0.1	33	0.00
	Assam	1494	0	25.8	19.1	0.4	175	0.00
	Manipur	203	0	2.6	2.8	-0.2	18	0.00
	Meghalaya	359	0	6.5	5.1	-0.1	24	0.00
	Mizoram	113	0	1.6	1.4	-0.2	21	0.00
	Nagaland	146	0	2.4	2.1	0.2	42	0.00
	Tripura	223	0	3.6	2.0	-0.4	9	0.00

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	13.8	1.6	-16.7
Day Peak (MW)	647.0	158.0	-838.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	171.3	-75.7	75.3	-165.9	-5.0	0.0
Actual(MU)	176.1	-64.4	63.3	-175.0	-4.6	-4.6
O/D/U/D(MU)	4.8	11.3	-12.0	-9.1	0.5	-4.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL	% Share
Central Sector	6310	16395	11832	2030	384	36950	42
State Sector	14500	19729	11031	5138	11	50408	58
Total	20810	36124	22863	7168	395	87358	100

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India	% Share
Coal	488	1140	381	525	11	2545	74
Lignite	25	8	32	0	0	65	2
Hydro	124	30	92	55	14	314	9
Nuclear	26	32	47	0	0	104	3
Gas, Naptha & Diesel	20	11	9	0	29	68	2
RES (Wind, Solar, Biomass & Others)	88	77	159	5	0	330	10
Total	772	1298	719	585	53	3427	100

Share of RES in total generation (%)	11.45	5.93	22.08	0.90	0.56	9.62
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	30.83	10.74	41.35	10.25	25.86	21.84

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.014
Based on State Max Demands	1.044

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-Nov-2021

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	502	0.0	12.0	-12.0
2	HVDC	PUSAULI B/B	-	0	249	0.0	6.0	-6.0
3	765 kV	GAYA-VARANASI	2	111	752	0.0	8.0	-8.0
4	765 kV	SASARAM-FATEHPUR	1	0	534	0.0	6.5	-6.5
5	765 kV	GAYA-BALIA	1	0	453	0.0	8.4	-8.4
6	400 kV	PUSAULI-VARANASI	1	0	152	0.0	3.0	-3.0
7	400 kV	PUSAULI -ALLAHABAD	1	0	171	0.0	3.5	-3.5
8	400 kV	MUZAFFARPUR-GORAKHPUR	2	0	566	0.0	8.4	-8.4
9	400 kV	PATNA-BALIA	4	0	1028	0.0	17.2	-17.2
10	400 kV	BIHARSHARIFF-BALIA	2	0	423	0.0	5.5	-5.5
11	400 kV	MOTIHARI-GORAKHPUR	2	0	329	0.0	5.2	-5.2
12	400 kV	BIHARSHARIFF-VARANASI	2	61	297	0.0	2.6	-2.6
13	220 kV	PUSAULI-SAHUPURI	1	16	59	0.0	0.7	-0.7
14	132 kV	SONE NAGAR-RIHAND	1	0	0	0.0	0.1	-0.1
15	132 kV	GARWAH-RIHAND	1	25	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	86.9	-86.6
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	4	354	1117	0.0	11.6	-11.6
2	765 kV	NEW RANCHI-DHARAMJAIGARH	2	409	602	0.0	4.3	-4.3
3	765 kV	JHARSUGUDA-DURG	2	0	465	0.0	7.9	-7.9
4	400 kV	JHARSUGUDA-RAIGARH	4	112	274	0.0	2.1	-2.1
5	400 kV	RANCHI-SIPAT	2	115	180	0.0	1.2	-1.2
6	220 kV	BUDHIPADAR-RAIGARH	1	21	82	0.0	0.7	-0.7
7	220 kV	BUDHIPADAR-KORBA	2	145	0	1.9	0.0	1.9
					ER-WR	1.9	27.8	-25.9
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	2	0	392	0.0	8.7	-8.7
2	HVDC	TALCHER-KOLAR BIPOLE	2	0	1980	0.0	42.7	-42.7
3	765 kV	ANGUL-SRIKAKULAM	2	0	3091	0.0	52.6	-52.6
4	400 kV	TALCHER-I/C	2	362	270	0.5	0.0	0.5
5	220 kV	BALIMELA-UPPER-SILERRU	1	2	0	0.0	0.0	0.0
					ER-SR	0.0	104.1	-104.1
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	2	0	285	0.0	4.4	-4.4
2	400 kV	ALIPURDUAR-BONGAIGAON	2	72	263	0.0	2.2	-2.2
3	220 kV	ALIPURDUAR-SALAKATI	2	0	57	0.0	0.7	-0.7
					ER-NER	0.0	7.4	-7.4
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	2	0	503	0.0	12.1	-12.1
					NER-NR	0.0	12.1	-12.1
Import/Export of WR (With NR)								
1	HVDC	CHAMPA-KURUKSHETRA	2	0	1118	0.0	20.6	-20.6
2	HVDC	VINDHYACHAL B/B	-	227	0	6.1	0.0	6.1
3	HVDC	MUNDRA-MOHINDERGARH	2	0	0	0.0	0.0	0.0
4	765 kV	GWALIOR-AGRA	2	0	1829	0.0	27.6	-27.6
5	765 kV	GWALIOR-PHAGI	2	0	1787	0.0	30.2	-30.2
6	765 kV	JABALPUR-ORAI	2	0	877	0.0	26.7	-26.7
7	765 kV	GWALIOR-ORAI	1	750	0	13.6	0.0	13.6
8	765 kV	SATNA-ORAI	1	0	1157	0.0	21.4	-21.4
9	765 kV	BANASKANTHA-CHITORGARH	2	1339	0	24.3	0.0	24.3
10	765 kV	VINDHYACHAL-VARANASI	2	0	2224	0.0	40.8	-40.8
11	400 kV	ZERDA-KANKROLI	1	310	0	5.7	0.0	5.7
12	400 kV	ZERDA -BHINMAL	1	477	0	6.7	0.0	6.7
13	400 kV	VINDHYACHAL -RIHAND	1	969	0	21.6	0.0	21.6
14	400 kV	RAPP-SHUJALPUR	2	230	194	1.3	0.8	0.4
15	220 kV	BHANPURA-RANPUR	1	153	0	0.7	0.0	0.7
16	220 kV	BHANPURA-MORAK	1	0	30	0.0	0.5	-0.4
17	220 kV	MEHGAON-AURAIYA	1	121	0	1.2	0.0	1.2
18	220 kV	MALANPUR-AURAIYA	1	85	0	1.9	0.0	1.9
19	132 kV	GWALIOR-SAWAI MADHOPUR	1	0	0	0.0	0.0	0.0
20	132 kV	RAJGHAT-LALITPUR	2	0	0	0.0	0.0	0.0
					WR-NR	83.0	168.4	-85.5
Import/Export of WR (With SR)								
1	HVDC	BHADRAWATI B/B	-	0	8	0.0	0.0	0.0
2	HVDC	RAIGARH-PUGALUR	2	1095	0	17.0	0.0	17.0
3	765 kV	SOLAPUR-RAICHUR	2	1147	2179	0.0	9.4	-9.4
4	765 kV	WARDHA-NIZAMABAD	2	0	2286	0.0	28.1	-28.1
5	400 kV	KOLHAPUR-KUDGI	2	958	0	13.9	0.0	13.9
6	220 kV	KOLHAPUR-CHIKODI	2	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	1	0	0	0.0	0.0	0.0
8	220 kV	XELDEM-AMBEWADI	1	0	97	1.9	0.0	1.9
					WR-SR	32.8	37.5	-4.7

INTERNATIONAL EXCHANGES

Import(+ve)/Export(-ve)

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	400kV MANGDECHHU-ALIPURDUAR 1,2&3 i.e. ALIPURDUAR RECEIPT (from MANGDECHU HEP 4*180MW)	190	0	162	3.9
	ER	400kV TALA-BINAGURI 1,2,4 (& 400kV MALBASE - BINAGURI) i.e. BINAGURI RECEIPT (from TALA HEP (6*170MW)	384	0	365	8.8
	ER	220kV CHUKHA-BIRPARA 1&2 (& 220kV MALBASE - BIRPARA) i.e. BIRPARA RECEIPT (from CHUKHA HEP 4*84MW)	49	0	30	0.7
	NER	132kV GELEPHU-SALAKATI	10	1	6	0.1
	NER	132kV MOTANGA-RANGIA	14	5	9	0.2
NEPAL	NR	132kV MAHENDRANAGAR-TANAKPUR(NHPC)	0	0	0	0.0
	ER	NEPAL IMPORT (FROM BIHAR)	0	0	0	0.0
	ER	400kV DHALKEBAR-MUZAFFARPUR 1&2	158	57	68	1.6
BANGLADESH	ER	BHERAMARA B/B HVDC (BANGLADESH)	-742	-452	-613	-14.7
	NER	132kV COMILLA-SURAJMANI NAGAR 1&2	-96	0	-83	-2.0