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: 21th Nov 2019

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 20.11.2019.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-नवम्बर-2019 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 Nov 2019, 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-Nov-19**

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	43782	47733	39510	18301	2318	151644
Peak Shortage (MW)	513	0	50	0	52	615
Energy Met (MU)	874	1104	918	345	41	3282
Hydro Gen (MU)	133	52	102	50	15	351
Wind Gen (MU)	3	22	35	----------	----------	60
Solar Gen (MU)*	31.44	20.4	72.44	1.99	0.00	126
Energy Shortage (MU)	10.9	0.0	0.3	0.0	0.5	11.6
Maximum Demand Met during the day (MW) & time (from NLDC SCADA)	43935 18:34	50007 10:57	41810 18:31	18143 18:01	2943 17:56	154417 18:28

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	0.035	0.00	0.93	5.64	6.56	78.81	14.63

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	5314	0	105.3	41.6	-1.8	140	0.0
	Haryana	5860	0	114.6	102.2	0.7	162	0.0
	Rajasthan	11227	0	214.7	63.3	-1.1	454	0.0
	Delhi	3369	0	63.6	50.3	-0.7	154	0.0
	UP	14637	0	266.3	115.3	0.5	944	0.5
	Uttarakhand	1732	0	34.1	19.8	-0.3	62	0.0
	HP	1562	10	27.7	19.6	-0.3	79	0.0
	J&K	2150	538	43.9	36.9	-0.6	201	10.3
	Chandigarh	199	0	3.5	3.2	0.3	42	0.0
WR	Chhattisgarh	3345	0	71.1	29.3	1.5	328	0.0
	Gujarat	14710	0	318.6	75.9	3.5	366	0.0
	MP	12302	0	238.4	151.7	-1.4	419	0.0
	Maharashtra	20066	0	431.3	134.2	-2.6	298	0.0
	Goa	608	0	13.4	11.9	0.9	100	0.0
	DD	331	0	7.4	6.5	0.9	70	0.0
	DNH	784	0	18.3	18.1	0.2	46	0.0
	Essar steel	301	0	5.7	5.7	0.0	295	0.0
SR	Andhra Pradesh	7761	0	167.6	78.6	-0.6	417	0.0
	Telangana	9150	0	194.8	79.9	2.4	457	0.0
	Karnataka	9875	0	186.2	44.4	-0.8	520	0.0
	Kerala	3446	-50	71.5	50.9	1.2	233	0.2
	Tamil Nadu	13895	0	290.2	175.0	2.2	817	0.0
	Pondy	371	0	7.4	7.8	-0.5	19	0.0
ER	Bihar	3935	0	67.5	61.5	-0.9	250	0.0
	DVC	3022	0	63.1	-39.7	-0.4	70	0.0
	Jharkhand	1311	0	24.1	16.4	0.0	31	0.0
	Odisha	3922	0	74.9	8.3	0.0	120	0.0
	West Bengal	6300	0	114.1	31.3	1.0	250	0.0
	Sikkim	100	0	1.4	1.4	0.1	25	0.0
NER	Arunachal Pradesh	112	1	2.1	2.3	-0.4	65	0.0
	Assam	1412	45	23.2	18.0	0.0	121	0.5
	Manipur	158	1	2.5	2.6	0.0	36	0.0
	Meghalaya	345	0	6.0	3.5	0.0	32	0.0
	Mizoram	99	1	1.9	0.7	0.1	16	0.0
	Nagaland	121	2	2.1	2.0	-0.2	22	0.0
	Tripura	231	1	3.5	2.6	-0.8	22	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	11.1	-1.4	-14.2
Day peak (MW)	603.2	-230.3	-842.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	196.9	-197.8	116.5	-114.0	-1.6	0.1
Actual(MU)	192.8	-195.0	131.4	-124.9	-5.9	-1.6
O/D/U/D(MU)	-4.1	2.8	14.9	-10.9	-4.3	-1.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	6123	17431	8432	2375	563	34924
State Sector	12973	17889	10383	5935	11	47191
Total	19096	35320	18815	8310	575	82115

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	439	1116	423	441	52	2470
Lignite	22	15	60	0	0	96
Hydro	133	52	102	50	0	336
Nuclear	28	28	55	0	0	111
Gas, Naptha & Diesel	23	56	16	0	0	95
RES (Wind, Solar, Biomass & Others)	56	47	141	2	0	246
Total	701	1313	796	493	52	3354

Share of RES in total generation (%)	8.01	3.58	17.70	0.41	0.00	7.33
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	31.05	9.64	37.37	10.51	0.00	20.67

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.016
Based on State Max Demands	1.062

Diversity factor = Sum of regional or state-wise maximum demands / All India maximum demand

***Source:** RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

कार्यपालक निदेशक (रा० भा० प्रे० के०)

INTER-REGIONAL EXCHANGES

Date of Reporting : **21-Nov-19**

Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU) (Import=(+ve) /Export =(-ve) for NET (MU)
Import/Export of ER (With NR)								
1	765kV	GAYA-VARANASI	D/C	0	727	0.0	12.8	-12.8
2		SASARAM-FATEHPUR	S/C	0	436	0.0	7.3	-7.3
3		GAYA-BALIA	S/C	0	402	0.0	7.7	-7.7
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5		PUSAULI B/B	S/C	0	196	0.0	4.7	-4.7
6	400 kV	PUSAULI-VARANASI	S/C	0	145	0.0	2.5	-2.5
7		PUSAULI -ALLAHABAD	S/C	0	123	0.0	2.1	-2.1
8		MUZAFFARPUR-GORAKHPUR	D/C	0	1151	0.0	19.3	-19.3
9		PATNA-BALIA	Q/C	0	1177	0.0	25.2	-25.2
10		BIHARSHARIFF-BALIA	D/C	0	429	0.0	8.0	-8.0
11		MOTIHARI-GORAKHPUR	D/C	3	5	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	0	340	0.0	5.3	-5.3
13	220 kV	PUSAULI-SAHUPURI	S/C	0	78	0.0	1.4	-1.4
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15		GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
					ER-NR	**0.4**	**96.3**	**-95.9**
Import/Export of ER (With WR)								
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1509	0	23.6	0.0	23.6
19		NEW RANCHI-DHARAMJAIGARH	D/C	213	545	0.0	2.8	-2.8
20		JHARSUGUDA-DURG	D/C	25	168	0.0	1.4	-1.4
21	400 kV	JHARSUGUDA-RAIGARH	Q/C	67	235	0.0	1.8	-1.8
22		RANCHI-SIPAT	D/C	98	169	0.0	0.8	-0.8
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	131	0.0	2.1	-2.1
24		BUDHIPADAR-KORBA	D/C	46	72	0.0	0.3	-0.3
					ER-WR	**23.6**	**9.2**	**14.5**
Import/Export of ER (With SR)								
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1999.0	0.0	39.9	-39.9
26	HVDC LINK	JEYPORE-GAZUWAKA B/B	D/C	0.0	694.0	0.0	16.1	-16.1
27		TALCHER-KOLAR BIPOLE	D/C	0.0	1984.0	0.0	47.8	-47.8
28	400 kV	TALCHER-I/C	D/C	174.0	556.0	0.0	6.6	-6.6
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	**0.0**	**103.8**	**-103.8**
Import/Export of ER (With NER)								
30	400 kV	BINAGURI-BONGAIGAON	D/C	377	78	6.1	0.0	6
31		ALIPURDUAR-BONGAIGAON	D/C	426	0	7.4	0.0	7
32	220 kV	ALIPURDUAR-SALAKATI	D/C	74	75	1.0	0.0	1
					ER-NER	**14.6**	**0.0**	**14.6**
Import/Export of NER (With NR)								
33	HVDC	BISWANATH CHARIALI-AGRA	-	467	0	8.7	0.0	8.7
					NER-NR	**8.7**	**0.0**	**8.7**
Import/Export of WR (With NR)								
34	HVDC	CHAMPA-KURUKSHETRA	D/C	0	1001	0.0	16.7	-16.7
35		V'CHAL B/B	D/C	451	0	8.7	0.0	8.7
36		APL -MHG	D/C	0	1739	0.0	38.4	-38.4
37	765 kV	GWALIOR-AGRA	D/C	0	1852	0.0	31.5	-31.5
38		PHAGI-GWALIOR	D/C	0	1085	0.0	19.1	-19.1
39		JABALPUR-ORAI	D/C	536	661	0.0	23.2	-23.2
40		GWALIOR-ORAI	S/C	596	0	11.5	0.0	11.5
41		SATNA-ORAI	S/C	0	1390	0.0	26.7	-26.7
42		CHITTORGARH-BANASKANTHA	D/C	124	535	0.0	3.9	-3.9
43	400 kV	ZERDA-KANKROLI	S/C	112	82	1.3	0.2	1.1
44		ZERDA -BHINMAL	S/C	78	222	0.1	1.4	-1.3
45		V'CHAL -RIHAND	S/C	983	0	22.8	0.0	22.8
46		RAPP-SHUJALPUR	D/C	226	37	1	0	1
47	220 kV	BHANPURA-RANPUR	S/C	25	32	0.1	0.2	-0.1
48		BHANPURA-MORAK	S/C	44	56	0.3	0.2	0.1
49		MEHGAON-AURAIYA	S/C	104	0	1.6	0.0	1.6
50		MALANPUR-AURAIYA	S/C	52	4	0.6	0.0	0.6
51	132kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
					WR-NR	**48.3**	**161.5**	**-113.2**
Import/Export of WR (With SR)								
52	HVDC LINK	BHADRAWATI B/B	-	0	995	0.0	14.7	-14.7
53		BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0
54	765 kV	SOLAPUR-RAICHUR	D/C	182	1821	0.0	22.7	-22.7
55		WARDHA-NIZAMABAD	D/C	2303	2360	0.0	42.8	-42.8
56	400 kV	KOLHAPUR-KUDGI	D/C	804	50	8.7	0.0	8.7
57	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
58		PONDA-AMBEWADI	S/C	0	88	0.0	1.6	-1.6
59		XELDEM-AMBEWADI	S/C	0	99	1.8	0.0	1.8
					WR-SR	**10.5**	**81.7**	**-71.3**
TRANSNATIONAL EXCHANGE								
60		BHUTAN						**11.1**
61		NEPAL						**-1.4**
62		BANGLADESH						**-14.2**