

## National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

## POWER SYSTEM OPERATION CORPORATION LIMITED पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 14<sup>th</sup> Dec 2019

To,

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ 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.,२९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

## Sub: Daily PSP Report for the date 13.12.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 13-दिसम्बर-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ 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 13<sup>th</sup> Dec 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 14-Dec-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)	40678	46838	38311	17140	2189	145156
Peak Shortage (MW)	425	0	0	0	37	462
Energy Met (MU)	748	1090	926	332	37	3132
Hydro Gen (MU)	126	36	79	41	9	291
Wind Gen (MU)	3	25	36			64
Solar Gen (MU)*	19.02	21	81.67	1.37	0.03	123
Energy Shortage (MU)	9.2	0.0	0.0	0.0	0.3	9.5
Maximum Demand Met during the day (MW) & time	41204	49850	44592	17548	2360	149581
(from NLDC SCADA)	18:28	11:13	07:34	18:26	17:21	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	0.051	0.00	0.00	6.18	6.18	65.22	28.60

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
	Punjab	4938	0	94.7	51.7	-1.2	185	0.0
	Haryana	5816	0	95.7	70.5	0.4	230	0.0
	Rajasthan	11034	0	202,2	62.3	-1.0	555	0.0
	Delhi	3900	0	66.8	54.8	-0.2	264	0.0
NR	UP	11777	0	186.8	81.8	-10.1	945	0.0
	Uttarakhand	1521	0	29.5	17.5	-3.1	115	0.0
	HP	1572	0	29.2	22.1	-0.6	109	0.0
	J&K(UT) and Ladakh(UT)	2087	522	38.9	33.1	-0.5	201	9.2
	Chandigarh	231	0	4.3	3.8	0.4	66	0.0
	Chhattisgarh	3544	0	75.8	16.4	-1.1	148	0.0
	Gujarat	15014	0	319.3	113.0	2.6	490	0.0
	MP	11008	0	211.0	115.5	-1.3	419	0.0
WR	Maharashtra	21301	0	438.7	150.8	-7.7	441	0.0
WK	Goa	613	0	12.6	12.2	0.0	30	0.0
	DD	337	0	7.4	7.0	0.4	43	0.0
	DNH	801	0	18.8	18.9	-0.1	25	0.0
	Essar steel	320	0	6.1	5.8	0.3	295	0.0
	Andhra Pradesh	7658	0	159.3	72.6	0.6	277	0.0
	Telangana	9791	0	199.6	94.7	1.4	692	0.0
SR	Karnataka	11279	0	204.2	38.5	3.2	980	0.0
JK.	Kerala	3640	0	72.4	58.0	1.1	214	0.0
	Tamil Nadu	13937	0	283.2	160.0	-1.1	407	0.0
	Pondy	357	0	7.3	7.5	-0.2	29	0.0
	Bihar	3250	0	53.8	54.6	-1.5	310	0.0
	DVC	2969	0	62.6	-29.0	-1.3	280	0.0
ER	Jharkhand	1231	0	24.0	17.7	-1.2	31	0.0
EN	Odisha	4006	0	76.2	14.4	0.2	220	0.0
	West Bengal	6234	0	113.2	18.7	0.9	290	0.0
	Sikkim	104	0	1.8	1.7	0.1	20	0.0
	Arunachal Pradesh	117	2	2.1	1.7	0.1	32	0.0
	Assam	1253	12	19.0	15.8	0.9	176	0.3
	Manipur	187	2	2.6	2.7	-0.1	33	0.0
NER	Meghalaya	344	0	6.0	2.4	0.8	64	0.0
	Mizoram	101	2	1.7	0.7	0.4	28	0.0
	Nagaland	119	3	2.1	2.2	-0.3	64	0.0
	Tripura	223	0	3.3	1.2	-0.6	29	0.0

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

The state of the s	Bhutan	Nepal	Bangladesh
Actual(MU)	6.5	-5.3	-7.1
Day peak (MW)	330.5	-322.7	-547.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	176.5	-179.8	118.2	-114.5	-0.5	-0.1
Actual(MU)	140.0	-174.6	141.1	-109.0	3.3	0.8
O/D/U/D(MU)	-36.5	5.2	22.9	5.5	3.8	0.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5671	16553	7862	1260	694	32039
State Sector	15397	15182	9120	6570	11	46280
Total	21068	31734	16982	7830	705	78319

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	369	1124	441	409	12	2355
Lignite	20	14	40	0	0	73
Hydro	126	36	79	41	9	291
Nuclear	24	25	57	0	0	106
Gas, Naptha & Diesel	26	32	16	0	17	90
RES (Wind, Solar, Biomass & Others)	50	51	159	1	0	262
Total	616	1282	791	451	37	3179

Share of RES in total generation (%)	8.19	3.98	20.10	0.31	0.08	8.24
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	32.60	8.75	37.30	9.31	24.68	20.75

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.040	
Based on State Max Demands	1.087	

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

 $<sup>\</sup>textbf{*Source} : \textbf{RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.}$ 

		INTER-REGIONAL EXCHANGES  Date of Reporting:								
								Import=(+ve) /Export =(-ve) for NET (MU)		
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)		
Import/I		ER (With NR)			l	l l	(1120)	(1120)		
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0		
5		PUSAULI B/B	S/C	0	196	0.0	4.8	-4.8		
1	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	80	1146 620	0.0	11.9	-11.9		
3	70384	GAYA-BALIA	S/C S/C	0	392	0.0	6.7 2.2	-6.7 -2.2		
6		PUSAULI-VARANASI	S/C	0	161	0.0	2.5	-2.5		
7		PUSAULI -ALLAHABAD	S/C	0	166	0.0	2.2	-2.2		
8		MUZAFFARPUR-GORAKHPUR	D/C	0	968	0.0	11.2	-11.2		
9	400 kV	PATNA-BALIA	Q/C	0	1166	0.0	14.8	-14.8		
10		BIHARSHARIFF-BALIA	D/C	0	536	0.0	7.3	-7.3		
11	1	MOTIHARI-GORAKHPUR	D/C	4	4	0.0	0.0	0.0		
12		BIHARSHARIFF-VARANASI	D/C	73	455	0.0	4.2	-4.2		
13	220 kV	PUSAULI-SAHUPURI	S/C	56	76	0.0	0.5	-0.5		
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0		
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.3	0.0	0.3		
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		
		TO AND AND			ER-NR	0.3	63.3	-63.1		
lmport/I	Export of	ER (With WR)					1	_		
18	1	JHARSUGUDA-DHARAMJAIGARH	Q/C	1467	84	16.4	0.0	16.4		
19	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	169	725	0.0	6.8	-6.8		
20		JHARSUGUDA-DURG	D/C	12	314	0.0	3.3	-3.3		
21	400 kV	JHARSUGUDA-RAIGARH	Q/C	273	166	1.0	0.0	1.0		
22		RANCHI-SIPAT	D/C	116	211	0.0	1.1	-1.1		
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	140	0.0	2.2	-2.2		
24		BUDHIPADAR-KORBA	D/C	153	0	2.2	0.0	2.2		
*		ED GWIA GD)			ER-WR	19.6	13.5	6.1		
	Export of	ER (With SR)	D/G	0.0	504.0	0.0	161	151		
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	684.0	0.0	16.1	-16.1		
27		TALCHER-KOLAR BIPOLE	D/C	0.0	1983.0	0.0	36.5	-36.5		
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	2201.0	0.0	40.7	-40.7		
28	400 kV	TALCHER-I/C	D/C	899.0	995.0	0.0	2.1	-2.1		
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0 ER-SR	0.0 <b>0.0</b>	0.0 93.3	0.0 -93.3		
Import/F	Export of	ER (With NER)			ER-5R	0.0	73.3	-93.3		
30	T	BINAGURI-BONGAIGAON	D/C	234	23	3.4	0.0	3		
31	400 kV	ALIPURDUAR-BONGAIGAON	D/C	200	0	2.5	0.0	2		
32	220 kV	ALIPURDUAR-SALAKATI	D/C	44	37	0.5	0.0	0		
	1				ER-NER	6.3	0.0	6.3		
Import/I	Export of	NER (With NR)				•	•	•		
33	HVDC	BISWANATH CHARIALI-AGRA	-	485	0	10.4	0.0	10.4		
					NER-NR	10.4	0.0	10.4		
Import/I	Export of	WR (With NR)								
34		CHAMPA-KURUKSHETRA	D/C	0	580	0.0	13.2	-13.2		
35	HVDC	V'CHAL B/B	D/C	363	0	9.8	0.0	9.8		
36		APL -MHG	D/C	0	884	0.0	13.9	-13.9		
37	4	GWALIOR-AGRA	D/C	0	2361	0.0	34.1	-34.1		
38	4	PHAGI-GWALIOR	D/C	0	1698	0.0	22.1	-22.1		
39	765 kV	JABALPUR-ORAI	D/C	77	684	0.0	18.9	-18.9		
40	4	GWALIOR-ORAI	S/C	780	0	11.8	0.0	11.8		
41	4	SATNA-ORAI	S/C	0	1379	0.0	25.5	-25.5		
42	<del>                                     </del>	CHITTORGARH-BANASKANTHA	D/C	539	759	0.0	2.2	-2.2		
43	4	ZERDA-KANKROLI	S/C	188	106	0.8	0.0	0.8		
44	400 kV	ZERDA -BHINMAL	S/C	139	354	0.0	2.7	-2.7		
45	4	V'CHAL -RIHAND	S/C	982	0	21.3	0.0	21.3		
46	+	RAPP-SHUJALPUR	D/C	274	260	1	2	0		
47	1	BHANPURA-RANPUR	S/C	25	79	0.6	0.0	0.6		
48	220 kV	BHANPURA-MORAK MEHGAON-AURAIYA	S/C S/C	36 131	141 0	1.4	0.0	-1.6 1.4		
50	-	MALANPUR-AURAIYA	S/C	99	13	0.8	0.0	0.8		
	132kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0		
51	102RY	OALION-OAWAI MADROFUR	3/	U	WR-NR	47.8	136.0	-88.2		
51		WR (With SR)				77.0	150.0	-00.2		
	Export of			0	813	0.0	16.3	-16.3		
Import/I	T .		- 1			0.0	0.0	0.0		
	Export of HVDC	BHADRAWATI B/B BARSUR-L.SILERU	-	0	0					
Import/I	HVDC	BHADRAWATI B/B		0	2229	0.0	31.1	-31.1		
52 53	T .	BHADRAWATI B/B BARSUR-L.SILERU	-				31.1 40.5	-31.1 -40.5		
52 53 54	HVDC	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	- D/C	0 1963	2229	0.0	40.5			
52 53 54 55	HVDC - 765 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	D/C D/C	0	2229 2781	0.0		-40.5		
52 53 54 55 56	HVDC - 765 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	D/C D/C D/C	0 1963 534	2229 2781 0	0.0 0.0 7.9	40.5 0.0	-40.5 7.9		
52 53 54 55 56 57	HVDC 765 kV 400 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C D/C D/C D/C D/C	0 1963 534 0	2229 2781 0	0.0 0.0 7.9 0.0	40.5 0.0 0.0	-40.5 7.9 0.0		
52 53 54 55 56 57 58	HVDC 765 kV 400 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C D/C D/C D/C S/C	0 1963 534 0	2229 2781 0 0 67	0.0 0.0 7.9 0.0 0.0	40.5 0.0 0.0 1.3	-40.5 7.9 0.0 -1.3		
52 53 54 55 56 57 58	HVDC 765 kV 400 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	- D/C D/C D/C D/C D/C S/C S/C	0 1963 534 0 0	2229 2781 0 0 67 76 WR-SR	0.0 0.0 7.9 0.0 0.0	40.5 0.0 0.0 1.3 0.0	-40.5 7.9 0.0 -1.3 1.4		
52 53 54 55 56 57 58	HVDC 765 kV 400 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	- D/C D/C D/C D/C D/C S/C S/C	0 1963 534 0	2229 2781 0 0 67 76 WR-SR	0.0 0.0 7.9 0.0 0.0	40.5 0.0 0.0 1.3 0.0	-40.5 7.9 0.0 -1.3 1.4 -79.7		
52 53 54 55 56 57 58	HVDC 765 kV 400 kV	BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	- D/C D/C D/C D/C D/C S/C S/C	0 1963 534 0 0	2229 2781 0 0 67 76 WR-SR	0.0 0.0 7.9 0.0 0.0	40.5 0.0 0.0 1.3 0.0	-40.5 7.9 0.0 -1.3 1.4		