

## National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

## POWER SYSTEM OPËRATION 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, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

\_\_\_\_\_

दिनांक: 20<sup>th</sup> Nov 2020

Ref: POSOCO/NLDC/SO/Daily PSP Report

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 19.11.2020.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-नवंबर-2020 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 19<sup>th</sup> November 2020, is available at the NLDC website.

धन्यवाद.

## पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड राष्ट्रीय भार प्रेषण केंद्र, नई दिल्ली



20-Nov-2020

Date of Reporting: Report for previous day A. Power Supply Position at All India and Regional level NR WR TOTAL SR ER NER Demand Met during Evening Peak hrs(MW) (at 19:00 hrs; from RLDCs) 43118 48866 38155 18345 150947 Peak Shortage (MW) Energy Met (MU) 418 0 0 427 1172 832 360 860 42 3266 Hydro Gen (MU) 106 281 10 Wind Gen (MU)

61 24.93 58 92.95 122 157 Solar Gen (MU)\* Energy Shortage (MU) 34.89 1.8 0.0 0.0 0.0 0.1 1.8 Maximum Demand Met During the Day (MW) (From NLDC SCADA) 43480 54308 39096 18269 151981 Time Of Maximum Demand Met (From NLDC SCADA) 09:48 11:39 09:50 18:50 18:30 B. Frequency Profile (%)

Region All India < 49.9 4.19 FVI < 49.7 49.7 - 49.8 49.8 - 49.9 49.9 - 50.05 0.025 0.00 0.00 4.19

		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the day(MW)	maximum Demand(MW)	(MU)	Schedule (MU)	(MU)	(MW)	Shortag (MU)
	Punjab	5217	0	101.4	87.0	-0.8	112	1.8
	Haryana	5705	0	110.7	108.4	0.8	230	0.0
	Rajasthan	12406	0	230.4	85.6	1.6	416	0.0
	Delhi	3350	0	61.4	43.3	1.0	208	0.0
NR	UP	13742	0	238.5	88.7	-0.4	348	0.0
	Uttarakhand	1818	0	35.0	26.8	0.7	190	0.0
	HP	1585	0	30.2	22.5	0.7	241	0.0
	J&K(UT) & Ladakh(UT)	2503	0	49.4	43.6	0.6	385	0.0
	Chandigarh	180	0	3.1	3.1	0.0	15	0.0
	Chhattisgarh	3451	0	74.5	15.3	-0.5	224	0.0
WR	Gujarat	14268	0	306.1	40.8	1.7	380	0.0
	MP	13111	0	270.0	178.2	-2.3	516	0.0
	Maharashtra	22751	0	467.0	150.0	-2.5	538	0.0
	Goa	502	0	10.9	10.5	-0.2	33	0.0
	DD	328	0	7.2	6.9	0.3	30	0.0
	DNH	785	0	18.0	18.1	-0.1	33	0.0
	AMNSIL	901	0	18.4	1.2	0.6	315	0.0
	Andhra Pradesh	7772	0	167.5	79.3	-0.9	652	0.0
	Telangana	7199	0	148.3	45.8	-0.4	378	0.0
SR	Karnataka	9330	0	181.5	60.3	-1.9	439	0.0
	Kerala	3612	0	72.1	55.0	0.0	169	0.0
	Tamil Nadu	12995	0	255.3	181.3	-0.7	579	0.0
	Puducherry	363	0	7.1	7.7	-0.6	11	0.0
	Bihar	4270	0	76.4	76.8	-0.6	368	0.0
	DVC	3002	0	64.6	-49.0	-1.2	355	0.0
	Jharkhand	1356	0	24.9	18.5	-1.9	31	0.0
ER	Odisha	3943	0	74.2	7.4	-0.9	240	0.0
	West Bengal	6547	0	118.5	31.9	0.6	290	0.0
	Sikkim	106	0	1.5	1.5	0.0	10	0.0
	Arunachal Pradesh	117	2	1.9	1.7	0.3	24	0.0
	Assam	1469	3	24.0	20.6	0.2	138	0.0
	Manipur	210	1	2.7	2.8	-0.1	38	0.0
NER	Meghalaya	349	0	5.9	3.0	0.0	34	0.0
	Mizoram	102	2	1.6	0.9	0.3	25	0.0
	Nagaland	123	1	2.1	1.8	0.1	38	0.0
	Tripura	227	2	3.6	3.4	-0.6	11	0.0

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve) Bangladesh Bhutan Nepal Actual (MU) Day Peak (MW)

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

=							
	NR	WR	SR	ER	NER	TOTAL	
Schedule(MU)	296.4	-321.4	122.7	-99.5	1.8	-0.1	
Actual(MU)	294.8	-314.6	112.4	-98.6	3.1	-2.9	
O/D/U/D(MU)	-16	6.7	-10.2	0.0	1.4	-29	

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	7510	14083	10332	3850	809	36583
State Sector	18811	14633	14646	5772	11	53873
Total	26321	28716	24978	9622	820	90456

G. Sourcewise generation (MU)

G. Bourcewise generation (Me)						
	NR	WR	SR	ER	NER	All India
Coal	356	1276	349	423	7	2410
Lignite	21	13	35	0	0	70
Hydro	106	35	75	55	10	281
Nuclear	28	33	69	0	0	130
Gas, Naptha & Diesel	21	64	15	0	26	126
RES (Wind, Solar, Biomass & Others)	57	86	187	4	0	335
Total	590	1507	729	482	44	3352
CI CDEC' ( ) 1 (' (0/)						
Share of RES in total generation (%)	9.73	5.74	25.60	0.90	0.23	10.00
Chang of Non-fossil fuel (Hudus Nuclean and DEC) in total consention (9/)	22.45	10.22	45.22	10.22	22.50	22.25

H. All India Demand Diversity Factor

11 111 India Denama Diversity Luctor						
Based on Regional Max Demands	1.038					
Based on State Max Demands	1.090					

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.

## INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 20-Nov-2020

[ et ]		T	T	1		Date of Reporting:	20-Nov-2020	
Sl Voltage Level	Line Details	No. of Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)	
Import/Export of ER (								
1 HVDC	ALIPURDUAR-AGRA	2	0	500	0.0	9.8	-9.8	
2 HVDC 3 765 kV	PUSAULI B/B GAYA-VARANASI		0	299 836	0.0	7.1 9.5	-7.1 -9.5	
4 765 kV	SASARAM-FATEHPUR	í	64	351	0.0	2.6	-9.5 -2.6	
5 765 kV	GAYA-BALIA	Ĩ	0	493	0.0	8.2	-8.2	
6 400 kV	PUSAULI-VARANASI	1	0	249	0.0	5.2	-5.2	
7 400 kV 8 400 kV	PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	1 2	0 107	118 646	0.0	1.8 3.9	-1.8 -3.9	
9 400 kV	PATNA-BALIA	4	0	839	0.0	10.0	-10.0	
10 400 kV	BIHARSHARIFF-BALIA	2	65	309	0.0	2.5	-2.5	
11 400 kV	MOTIHARI-GORAKHPUR	2	0	275	0.0	4.6	-4.6	
12 400 kV 13 220 kV	BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI	2	126 36	289 46	0.0	0.6 0.0	-0.6 0.0	
14 132 kV	SONE NAGAR-RIHAND	i	0	0	0.0	0.0	0.0	
15 132 kV	GARWAH-RIHAND	1	20	0	0.2	0.0	0.2	
16 132 kV	KARMANASA-SAHUPURI	1	0	0	0.0	0.0	0.0	
17 132 kV	KARMANASA-CHANDAULI	<del></del>	0	0 ER-NR	0.0 0.2	0.0 65.9	0.0 -65.6	
Import/Export of ER (	(With WR)				0.2	05.7	-02.0	
1 765 kV	JHARSUGUDA-DHARAMJAIGARH	4	1152	287	8.1	0.0	8.1	
2 765 kV	NEW RANCHI-DHARAMJAIGARH	2	994	0	14.5	0.0	14.5	
3 765 kV	JHARSUGUDA-DURG	2	266	229	0.0	0.9	-0.9	
4 400 kV	JHARSUGUDA-RAIGARH	4	365	0	5.5	0.0	5.5	
5 400 kV	RANCHI-SIPAT	2	330	0	5.0	0.0	5.0	
6 220 kV	BUDHIPADAR-RAIGARH	1	29	91	0.0	0.6	-0.6	
7 220 kV	BUDHIPADAR-KORBA	2	190	0	3.2	0.0	3.2	
Import/Evet -f FF	(With CD)			ER-WR	36.2	1.5	34.8	
Import/Export of ER (	JEYPORE-GAZUWAKA B/B	2	n	380	0.0	8.7	-8.7	
2 HVDC	TALCHER-KOLAR BIPOLE	2	0	1642	0.0	36.6	-36.6	
3 765 kV	ANGUL-SRIKAKULAM	2	0	2785	0.0	49.6	-49.6	
4 400 kV	TALCHER-I/C	2	234	460	0.0	2.7	-2.7	
5 220 kV	BALIMELA-UPPER-SILERRU	1	1 1	0 ER-SR	0.0	0.0 94.8	0.0 -94.8	
Import/Export of ER								
1 400 kV	BINAGURI-BONGAIGAON	2	0	492	0.0	5.8	-5.8	
2 400 kV	ALIPURDUAR-BONGAIGAON	2	0	585	0.0	6.4	-6.4	
3 220 kV	ALIPURDUAR-SALAKATI	2	0	112 ER-NER	0.0	1.4 13.6	-1.4 -13.6	
Import/Export of NEF	R (With NR)							
1 HVDC	BISWANATH CHARIALI-AGRA	2	0	501	0.0	10.5	-10.5	
Import/Export of WR	(Wist ND)			NER-NR	0.0	10.5	-10.5	
1 HVDC	CHAMPA-KURUKSHETRA	2	1 0	1502	0.0	38.9	-38.9	
2 HVDC	VINDHYACHAL B/B	-	231	53	2.8	0.0	2.8	
3 HVDC	MUNDRA-MOHINDERGARH	2	0	1923	0.0	40.5	-40.5	
4 765 kV	GWALIOR-AGRA	2	0	2901	0.0	53.8	-53.8	
5 765 kV 6 765 kV	PHAGI-GWALIOR JABALPUR-ORAI	2	0	1739 1040	0.0	26.7 40.2	-26.7 -40.2	
7 765 kV	GWALIOR-ORAI	1	825	0	11.0	0.0	11.0	
8 765 kV	SATNA-ORAI	1	0	1550	0.0	33.3	-33.3	
9 765 kV 10 400 kV	CHITORGARH-BANASKANTHA	2	0	1028	0.0	12.8	-12.8	
10 400 KV	ZERDA-KANKROLI ZERDA -BHINMAL	1	4	224 516	0.0	2.0 6.4	-2.0 -6.4	
12 400 kV	VINDHYACHAL -RIHAND	1	968	0	22.7	0.0	22.7	
13 400 kV	RAPP-SHUJALPUR	2	0	446	0.0	5.4	-5.4	
14 220 kV 15 220 kV	BHANPURA-RANPUR	1	0	158	0.0	2.5	-2.5	
15 220 kV 16 220 kV	BHANPURA-MORAK MEHGAON-AURAIYA	1	11 76	0 19	0.0 0.1	2.0 0.2	-2.0 -0.1	
17 220 kV	MALANPUR-AURAIYA	î	40	35	0.5	0.0	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 WR-NR	0.0	0.0	0.0	
WR-NR   37,1   264.6   -227.5								
1 HVDC	BHADRAWATI B/B		0	525	0.0	12.2	-12.2	
2 HVDC	RAIGARH-PUGALUR	2	0	499	0.0	11.1	-11.1	
3 765 kV 4 765 kV	SOLAPUR-RAICHUR WARDHA-NIZAMABAD	2 2	1141	2430	0.0	19.4	-19.4 20.4	
5 400 kV	KOLHAPUR-KUDGI	2	521 818	1986 0	9.9	20.4 0.0	-20.4 9.9	
6 220 kV	KOLHAPUR-CHIKODI	2	0	Ü	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	48 WR-SR	0.9	63.2	0.9 -52.3	
		INTER	NATIONAL EXCHA		10.8	63.2	-52.3	
- a							Energy Exchange	
State	Region		Name	Max (MW)	Min (MW)	Avg (MW)	(MII)	
			U-ALIPURDUAR 1&2					
İ	ER	i.e. ALIPURDUAR RECEIPT (fro MANGDECHU HEP 4*180MW)		256	0	180	4.3	
İ		400kV TALA-BINAGU						
1	ER	MALBASE - BINAGU	RI) i.e. BINAGURI	313	303	313	7.9	
İ		RECEIPT (from TALA 220kV CHUKHA-BIR	A HEP (6*170MW)					
BHUTAN	ER	MALBASE - BIRPAR	A) i.e. BIRPARA	63	0	20	0.5	
		RECEIPT (from CHU	KHA HEP 4*84MW)					
İ	<b></b>	132KV-GEYLEGPHU		1.			0.0	
İ	NER	152KV-GETLEGPHU	- SALARAII	13	1	-2	0.0	
İ								
İ			ia .	19	14	-15	-0.4	
-	NER	132kV Motanga-Rangi		17				
	NER			17				
	NER NR	132KV-TANAKPUR(N	NH) -	-42	0	-3	-0.1	
			NH) -	-	0	-3	-0.1	
NEPAL.	NR	132KV-TANAKPUR(N MAHENDRANAGAR	NH) - (PG)	-42				
NEPAL		132KV-TANAKPUR(N	NH) - (PG)	-	0 -1	-3	-0.1	
NEPAL	NR ER	132KV-TANAKPUR(M MAHENDRANAGAR) 132KV-BIHAR - NEP	NH) - (PG)	-42	-1	-33	-0.8	
NEPAL	NR	132KV-TANAKPUR(M MAHENDRANAGAR) 132KV-BIHAR - NEP	NH) - (PG)	-42				
NEPAL	NR ER	132KV-TANAKPUR(M MAHENDRANAGAR) 132KV-BIHAR - NEP	NH) - (PG)	-42	-1	-33	-0.8	
NEPAL	NR ER	132KV-TANAKPUR(M MAHENDRANAGAR) 132KV-BIHAR - NEP	NH) - (PG) AL UR - DHALKEBAR DC	-42	-1	-33	-0.8	
NEPAL	NR ER ER	132KV-TANAKPUR(N MAHENDRANAGAR) 132KV-BIHAR - NEP, 220KV-MUZAFFARP BHERAMARA HVDC	NH) - (PG) AL UR - DHALKEBAR DC ((BANGLADESH)	-42 -130 52	-1 -35	-33	-0.8	
NEPAL BANGLADESH	NR ER ER	132KV-TANAKPUR(MAHENDRANAGAR) 132KV-BIHAR - NEP/ 220KV-MUZAFFARP BHERAMARA HVDC 132KV-SURAJMANI	NH) - (PG)  AL  UR - DHALKEBAR DC  (BANGLADESH)  NAGAR -	-42 -130 52	-1 -35	-33	-0.8	
	NR ER ER	132KV-TANAKPUR(N MAHENDRANAGAR) 132KV-BIHAR - NEP, 220KV-MUZAFFARP BHERAMARA HVDC	NH) - (PG)  AL  UR - DHALKEBAR DC  (BANGLADESH)  NAGAR -	-42 -130 52 -892	-1 -35 -501	-33 -3 -697	-0.8 -0.1 -16.7	
	NR ER ER ER NER	132KV-TANAKPUR(N MAHENDRANAGARI 132KV-BIHAR - NEP/ 220KV-MUZAFFARP BHERAMARA HVDC 132KV-SURAJMANI 132KV-SURAJMANI 132KV-SURAJMANI	NH) - (PG)  AL  UR - DHALKEBAR DC  (BANGLADESH)  NAGAR -  DESH)-1  NAGAR -	-42 -130 52 -892 58	-1 -35 -501	-33 -3 -697 -48	-0.8 -0.1 -16.7	
	NR ER ER	132KV-TANAKPUR(N MAHENDRANAGAR) 132KV-BIHAR - NEP/ 220KV-MUZAFFARP BHERAMARA HVDC 132KV-SURAJMANI COMILLA(BANGLAI	NH) - (PG)  AL  UR - DHALKEBAR DC  (BANGLADESH)  NAGAR -  DESH)-1  NAGAR -	-42 -130 52 -892	-1 -35 -501	-33 -3 -697	-0.8 -0.1 -16.7	