

# 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: 29<sup>th</sup> Mar 2020

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 28.03.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 28-मार्च-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 28<sup>th</sup> Mar 2020, is available at the NLDC website.

धन्यवाद,

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



Report for previous day A. Power Supply Position at All India and Regional level Date of Reporting:

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	25947	31192	35205	16768	2215	111327
Peak Shortage (MW)	501	0	0	0	41	542
Energy Met (MU)	579	781	900	333	36	2629
Hydro Gen (MU)	158	27	73	41	4	304
Wind Gen (MU)	4	34	39	-	-	76
Solar Gen (MU)*	45.34	29.90	98.22	4.59	0.04	178
Energy Shortage (MU)	7.4	0.0	0.0	0.0	0.5	7.8
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	31196	35593	42125	16912	2203	117761
Time Of Maximum Demand Met (From NLDC SCADA)	19:52	07:43	09:42	20:26	18:36	19:47

B. Frequency Profile (%) 49.7 - 49.8 0.31 < 49.9 3.83 49.9 - 50.05 65.39 FVI 0.051 < 49.7 49.8 - 49.9

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·		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the	maximum	(MU)	Schedule	(MU)	(MW)	Shortag
		day(MW)	Demand(MW)	· -/	(MU)	` '		(MU)
	Punjab	3044	0	56.1	42.7	-1.3	136	0.0
	Haryana	3632	0	64.8	58.2	0.5	127	0.0
	Rajasthan	6704	0	123.5	41.3	-1.8	508	0.0
	Delhi	2294	0	42.4	32.5	-2.0	12	0.0
NR	UP	13031	0	219.4	98.7	-0.2	1074	0.0
	Uttarakhand	959	0	16.9	3.0	-2.6	105	0.0
	HP	875	0	12.6	1.7	-2.8	67	0.0
	J&K(UT) & Ladakh(UT)	2202	550	40.9	32.7	-1.8	328	7.4
	Chandigarh	141	0	2.2	2.6	-0.4	2	0.0
	Chhattisgarh	3156	0	73.6	24.1	-1.5	244	0.0
	Gujarat	9263	0	201.7	64.1	2.1	544	0.0
	MP	7276	0	142.8	92.0	-1.4	683	0.0
WR	Maharashtra	16197	0	351.0	140.0	-1.1	479	0.0
	Goa	343	0	6.8	6.9	-0.1	33	0.0
	DD	63	0	1.4	1.2	0.2	17	0.0
	DNH	78	0	1.7	1.8	-0.1	18	0.0
	Essar steel	234	0	1.9	1.8	0.1	94	0.0
	Andhra Pradesh	8138	0	161.0	77.3	0.7	452	0.0
	Telangana	10211	0	208.6	108.0	0.4	763	0.0
SR	Karnataka	10660	0	214.6	76.2	0.0	537	0.0
	Kerala	3581	0	67.5	51.7	1.0	204	0.0
	Tamil Nadu	10791	0	244.5	171.5	1.8	540	0.0
	Puducherry	207	0	4.1	4.9	-0.8	18	0.0
	Bihar	4236	0	67.3	71.3	-5.5	120	0.0
	DVC	1664	0	32.9	-21.9	0.6	210	0.0
	Jharkhand	1302	0	23.0	14.9	-0.6	105	0.0
ER	Odisha	3939	0	82.8	2.1	0.8	205	0.0
	West Bengal	6270	0	125.2	36.2	2.6	340	0.0
	Sikkim	104	0	1.3	1.6	-0.3	30	0.0
	Arunachal Pradesh	112	1	1.9	1.2	0.6	30	0.0
	Assam	1287	26	21.0	17.8	0.2	68	0.3
	Manipur	183	0	2.4	2.3	0.1	21	0.0
NER	Meghalaya	249	0	3.7	3.5	-0.2	36	0.1
	Mizoram	93	1	1.5	1.3	-0.2	17	0.0
	Nagaland	109	2	2.0	2.0	-0.1	13	0.0
	Trinura	253	0	3.6	3.4	-0.1	57	0.0

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

	Bhutan	Nepal	Bangladesh
Actual (MU)	5.6	-1.0	-13.1
Day Peak (MW)	742.7	177.6	-847.0

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

	NK	WK	SK	ER	NEK	TOTAL
Schedule(MU)	68.4	-164.2	162.2	-72.5	6.4	0.4
Actual(MU)	30.3	-161.0	174.0	-59.5	9.2	-7.0
O/D/U/D(MU)	-38.1	3.2	11.8	13.0	2.8	-7.4
						-

#### F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	6648	22895	7082	2205	1012	39842
State Sector	21528	25826	14495	8220	11	70080
Total	28176	48721	21577	10425	1023	109922

## G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	261	733	375	366	7	1742
Lignite	14	13	48	0	0	75
Hydro	158	27	74	41	4	304
Nuclear	23	36	64	0	0	123
Gas, Naptha & Diesel	27	63	19	0	22	130
RES (Wind, Solar, Biomass & Others)	76	74	145	5	0	300
Total	560	946	723	412	32	2674
anna						
Share of RES in total generation (%)	13.59	7.87	19.98	1.13	0.13	11.21
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total	46.00	14.49	38.98	11.18	11.77	27.18

#### H. All India Demand Diversity Factor

11: All Ilidia Dellialid Diversity Pactor	
Based on Regional Max Demands	1.087
Based on State Max Demands	1.128

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	t =(-ve) for NET (MU) : 29-Mar-2020
	Sl	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MII)		
1   10   10   10   10   10   10   10	Impo			Circuit	man import (mm)	Man Emport (MT)	import (iiie)	Export (MC)	TIET (IIIC)
1				-	0	0	0.0	0.0	0.0
1	2	HVDC	PUSAULI B/B					6.2	-6.2
## COLOR   STATE   STA					241				
	6	400 kV							
0									
19									
11									
10   20   20   20   20   24   2.4   2.4   2.4   2.4   2.4   2.5		400 kV	MOTIHARI-GORAKHPUR		0		0.0	3.2	-3.2
14   1334				D/C					
15   13   13   13   13   13   13   13									
10   152									
			KARMANASA-SAHUPURI						0.0
	17	132 kV	KARMANASA-CHANDAULI	S/C	0				
1	Impo	rt/Export of ER (	With WR)			ER-MK	7.5	30.0	-23.0
3   76 N.   HARSEQUIDA DURIG   DFC   22   147   0.0   1.4   -1.4				Q/C	1564	0	28.0	0.0	28.0
4   60 N	2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	685	303	5.2	0.0	5.2
S	3	765 kV	JHARSUGUDA-DURG	D/C	22	147	0.0	1.4	-1.4
1   1   1   1   1   1   1   1   1   1	4	400 kV	JHARSUGUDA-RAIGARH	Q/C	75	229	0.0	2.3	-2.3
7   20 AV   RICHIPLADER-KORRA   DC   104   17	5	400 kV	RANCHI-SIPAT	D/C	233	125	1.9	0.0	1.9
INDESTRUCTION   INDESTRUCT	6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	141	0.0	2.5	-2.5
	7	220 kV	BUDHIPADAR-KORBA	D/C	104		1.1	0.0	1.1
B   HYDC   BYYORE CAZUVANA BB   DC   0   600   0.0   16.0   1-6.0	Ļ	4/15 - 6775 -	THE CD			ER-WR	36.2	6.1	30.1
1   HYDC   TALCEREROLAR BIFOLE   D.C.   0   1988   0.0   40.9   40.9   40.9				D/C	n	600	0.0	16.0	-16 0
1									
Second Performance   Second	3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2888	0.0	53.9	-53.9
Import  Separat of FR (With NER)									
ImportExpert of FER (With NER)	_5_	220 kV	BALIMELA-UPPER-SILERRU	S/C	1				
1   409 AV   RINAGURE RONCA GAGON   DC   147   217   0.5   0.0   0.5	Impo	rt/Export of ER (	With NER)			LK-5K	V•V	110.0	-110.0
3   20 NY   ALPIPERICARSALAKATI   DC   43   67   0.0   0.0   0.5	1	400 kV	BINAGURI-BONGAIGAON		147				
Decomposition   Decompositio									
IMPORT   SIGN   NR   NR		220 KV	ALIPURDUAR-SALAKATI	D/C	43				
Import   Separt of WR   With NR   DC   0   0   0   0   0   0   0   0   0	Impo	rt/Export of NER	(With NR)			DATIDA	0.0	0.0	0.5
ImprofExport of VR (With NR)	1	HVDC	BISWANATH CHARIALI-AGRA	-	0				
Hype   Charage	Imno	rt/Evport of WD (	With ND			NER-NR	9.8	0.0	9.8
A	1 III po			D/C	0	0	0.0	3.8	-3.8
4   765 kV   GWALIORAGRA   DC   0   1721   0.0   231   -331   -		HVDC	V'CHAL B/B		449	0			
S   765 kV   PHAGI-GWALIOR   DC   0   1003   0.0   13.0   -1									
6			GWALIOR-AGRA						
7.   76.5 kV   GWALIOROBAL   S.C   S.IP   0   8.5   0.0   8.5     8.   76.6 kV   SATIN-ORDAL   S.C   0   1159   0.0   2.14   -2.14     9.   76.5 kV   CHITORGARIE-BANSKANTHA   D.C   86.3   0   11.9   0.0   11.0     10.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0.0   4.9     12.   400 kV   ZERDA-SANSKOLL   S.C   295   0   4.9   0   2.7     13.   400 kV   ZERDA-SANSKOLL   S.C   397   3   2.2   7   0   0   2.2     14.   4.   4.   4.   4.   4.   4.   4.									
8									
10		765 kV	SATNA-ORAI						-21.4
11   490 kV   ZERDA-BHINMAL   S/C   308   26   4.6   0.0   4.6									
12   400 kV   VCHAL RIHAND									
14   220 kV									
S   229 KV   BHANPURA-MORAK									
16   220 kV   WHICAON-AURAIYA   S/C   108   0									
17   220 kV   MALANPUR-AURAIYA									
NR NR   69.8   96.6   -26.8	17	220 kV	MALANPUR-AURAIYA		77			0.0	
Import/Export of WR (With SK)   -   0   1002   0.0   21.2   -21.2	18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0			0.0	
HVDC   BHADRAWATH B/B   -   0   1002   0.0   21.2   -21.2	Imno	rt/Export of WR (	With SR)			WK-NK	69.8	96.6	-26.8
A	1	HVDC	BHADRAWATI B/B	-	0	1002			
Variable		HVDC				0	0.0		0.0
S									
Comparison   Com			KOLHAPUR-KUDGI						
S   220 kV   XELDEM-AMBEWADI   S/C   0   63   1.2   0.0   1.2	6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MII)									
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MU)	8	220 KV	ALLDEM-AMBEWADI	ı S/C	. 0	0.5 WR-SR		108.4	1.2 -102.8
State   Region   Line Name   Max (MW)   Min (MW)   Avg (MW)   Energy Exchange (MII)	=			INTER	NATIONAL EXCUA		J.1	100.7	-102.0
ER   DAGACHU (2 * 63)   0   0   0   0   0.0	$\vdash$	E4-4-	ъ.				341 (344)		Energy Exchange
BHUTAN   ER   DAGACHU (2 * 63)   0   0   0   0   0.0	<u></u>	State	Region	Line	name	Max (MW)	Min (MW)	Avg (MW)	
BHUTAN  ER CHUKA (4 * 84) BIRPARA RECEIPT 69 36 -10 -0.3  ER MANGDECHHU (4 x 180)  ALIPURDUAR RECEIPT 207 168 153 3.7  ER TALA (6 * 170) BINAGURI RECEIPT 313 192 93 2.2  NER 132KV-SALAKATI - GELEPHU 0 0 0 -6 -0.2  NER 132KV-RANGIA - DEOTHANG 19 0 5 0.1  NR 132KV-Tanakpur(NH) 0 0 0 0 0 0 0 0.2  NEPAL ER 132KV-BHAR - NEPAL -100 -1 -9 -0.2  ER 220KV-MUZAFFARPUR - 0 0 0 0 0 0 0.2  BANGLADESH BER Bheramara HVDC(Bangladesh) -706 -256 -431 -10.3  NER 132KV-SURAJMANI NAGAR - 0 0 0 -58 -1.4			ER	DAGACHU (2 * 63	)	0	0	0	
BHUTAN   ER	1		ZA.	,	<u> </u>	3	J	U	0.0
ER	1		ER	CHUKA (4 * 84) B	IRPARA RECEIPT	69	36	-10	-0.3
ER		DITTELAN		MANGDECHHU (4	x 180)	207	1/0	150	2.7
NER   132KV-SALAKATI - GELEPHU   0   0   0   -6   -0.2		DHUIAN	ER	ALIPURDUAR RE	СЕІРТ	207	108	153	3.7
NER	1		ER	TALA (6 * 170) BI	NAGURI RECEIPT	313	192	93	2.2
NER	1								
NR	1		NER	132KV-SALAKATI	- GELEPHU	0	0	-6	-0.2
NR	1		NED	132KV-RANGIA - I	DEOTHANG	10	0	- 5	0.1
NR   Mahendranagar(PG)   0   0   0   0   -0.2	<u> </u>		HER			17	J	3	V-1
NEPAL   ER   132KV-BIHAR - NEPAL   -100   -1   -9   -0.2	1		NR			0	0	0	-0.2
ER	1	MEDIT							
BANGLADESH  ER  DHALKEBAR DC  -64  -2  -25  -0.6  -08  -25  -431  -10.3  -10.3  -10.3  BANGLADESH  NER  132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)  132KV-SURAJMANI NAGAR - 70  0 -58  -1.4	1	NEPAL	ER			-100	-1	-9	-0.2
BANGLADESH ER Bheramara HVDC(Bangladesh) -706 -256 -431 -10.3  BANGLADESH NER 132KV-SURAJMANI NAGAR - 71 0 -58 -1.4  NED 132KV-SURAJMANI NAGAR - 70 0 58 144	1		ER		RPUR -	-64	-2	-25	-0.6
BANGLADESH NER 132KV-SURAJMANI NAGAR - 71 0 -58 -1.4  NER 132KV-SURAJMANI NAGAR - 70 0 58 1.4	<u> </u>		ER	DHALKEBAR DC		-0-4	-2	-23	-0.0
BANGLADESH NER COMILLA(BANGLADESH)-1 71 0 -58 -1,4  NED 132KV-SURAJMANI NAGAR - 70 0 58 1.4	1		ER	Bheramara HVDC(I	Bangladesh)	-706	-256	-431	-10.3
BANGLADESH NER COMILLA(BANGLADESH)-1 71 0 -58 -1,4  NED 132KV-SURAJMANI NAGAR - 70 0 58 1.4		ANCI ADECI	<b></b> -	132KV-SURAJMAN	NI NAGAR -		6		
	BA	ANGLADESH	NER	COMILLA(BANGI	ADESH)-1	71	0	-58	-1.4
COMILLA(BANGLADESH)-2	1		NER	132KV-SURAJMAN	VI NAGAR -	70	0	-58	-1.4
	Щ_		- ,2244	COMILLA(BANGI	ADESH)-2	. •		1	1