

# 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: 20<sup>th</sup> Oct 2018

Τо

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, 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 ७९३००६ 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 19.10.2018.

महोदय/Dear Sir.

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-अक्टूबर-2018 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> October 2018, 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-Oct-18

#### A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	41652	50948	38552	18456	2163	151771
Peak Shortage (MW)	438	0	0	0	52	490
Energy Met (MU)	949	1236	860	384	36	3464
Hydro Gen (MU)	170	31	72	71	16	360
Wind Gen (MU)	6	16	13			35
Solar Gen (MU)*	21.37	19.86	67.88	0.82	0.04	110
Energy Shortage (MU)	9.6	1.2	0.0	0.0	0.8	11.7
Maximum Demand Met during the day	43286	56366	39158	18556	2023	154882
(MW) & time (from NLDC SCADA)	18:57	11:20	18:46	19:17	18:13	18:42

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	0.024	0.00	0.00	4.11	4.11	85.35	10.54

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	5360	0	123.7	22.4	-0.4	299	0.0
	Haryana	6203	0	132.2	90.0	0.2	214	0.0
	Rajasthan	10286	0	211.9	42.6	0.6	510	0.0
	Delhi	3335	0	69.6	51.7	-1.3	83	0.0
NR	UP	15513	0	314.3	125.4	-0.3	479	0.0
	Uttarakhand	1582	0	31.9	10.8	-0.4	91	0.0
	HP	1280	10	22.8	9.5	0.5	189	0.2
	J&K	1903	476	39.3	36.0	-6.3	-20	9.5
	Chandigarh	153	0	3.0	3.2	-0.2	16	0.0
	Chhattisgarh	4193	0	98.6	26.9	-2.5	131	0.0
	Gujarat	16397	0	365.7	140.3	6.0	667	0.0
	MP	11380	0	248.5	134.5	-1.7	762	0.0
WR	Maharashtra	23407	0	484.0	189.5	-2.2	547	1.2
WK	Goa	470	0	10.4	10.1	-0.2	49	0.0
	DD	256	0	5.7	5.0	0.7	50	0.0
	DNH	670	0	15.4	15.1	0.3	101	0.0
	Essar steel	395	0	7.8	7.5	0.3	292	0.0
	Andhra Pradesh	7495	0	170.2	68.3	1.0	474	0.0
	Telangana	9315	0	197.6	83.8	0.4	668	0.0
SR	Karnataka	7346	0	149.6	38.9	1.1	660	0.0
310	Kerala	3379	0	66.5	43.2	0.7	260	0.0
	Tamil Nadu	12518	0	268.9	127.0	2.0	768	0.0
	Pondy	342	0	6.8	7.1	-0.3	39	0.0
	Bihar	4027	0	78.3	77.9	-1.9	50	0.0
	DVC	2634	0	56.0	-21.4	-0.3	150	0.0
ER	Jharkhand	1000	0	21.8	13.1	-1.4	20	0.0
LIN	Odisha	4761	0	99.9	40.6	1.7	220	0.0
	West Bengal	6699	0	127.0	15.4	0.4	150	0.0
	Sikkim	67	0	0.8	1.4	-0.6	11	0.0
	Arunachal Pradesh	109	2	2.1	2.2	-0.1	137	0.0
	Assam	1245	24	19.2	14.2	0.1	136	0.7
	Manipur	166	3	2.2	2.4	-0.2	31	0.0
NER	Meghalaya	269	0	4.9	2.9	-0.2	49	0.0
	Mizoram	76	1	1.8	1.0	0.1	2	0.0
	Nagaland	102	2	2.1	1.8	-0.2	11	0.0
	Tripura	242	2	3.9	2.8	-0.5	5	0.1

 $\textbf{D. Transnational Exchanges} \ \ (\textbf{MU}) \textbf{-} \textbf{Import} (+\textbf{ve}) / \textbf{Export} (-\textbf{ve})$ 

	Bhutan	Nepal	Bangladesh
Actual(MU)	11.3	-1.0	-20.9
Day peak (MW)	610.0	-112.0	-913.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	116.3	-117.0	91.2	-81.1	-6.9	2.4
Actual(MU)	108.9	-117.5	93.8	-77.7	-9.9	-2.5
O/D/U/D(MU)	-7.4	-0.5	2.6	3.4	-3.0	-4.8

## F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5215	10923	7862	1010	56	25066
State Sector	8690	12724	7730	5635	50	34829
Total	13905	23647	15592	6645	106	59895

## G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Thermal (Coal & Lignite)	594	1226	526	413	7	2766
Hydro	170	31	72	71	16	360
Nuclear	24	27	23	0	0	74
Gas, Naptha & Diesel	30	44	24	0	26	125
RES (Wind, Solar, Biomass & Others)	45	37	125	1	0	208
Total	862	1366	771	485	50	3533

Share of RES in total generation (%)	5.22	2.73	16.20	0.18	0.08	5.89
Share of Non-fossil fuel (Hydro, Nuclear and	27.65	7.00	28.57	14 01	32.43	18.18
RES) in total generation (%)	27.05	7.00	20.57	14.81	32.43	10.10

H. Diversity Factor
All India Demand Diversity Factor
1.029
Diversity factor = Sum of regional maximum demands / All India maximum demand

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

						Date of I	20-Oct-	
								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)
	Export of	ER (With NR)	D/C	120	27.6	0.0	4.5	4.5
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	128 282	376 0	0.0 2.8	4.5 0.0	-4.5 2.8
3	70011	GAYA-BALIA	S/C	0	276	0.0	3.8	-3.8
4	HVDC	ALIPURDUAR-AGRA	-	0	501	0.0	10.0	-10.0
5	11,50	PUSAULI B/B	S/C	0	398	0.0	9.7	-9.7
7	-	PUSAULI-VARANASI	S/C S/C	0	298 178	0.0	6.2 3.3	-6.2 -3.3
8	1	PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	D/C	0	559	0.0	8.6	-8.6
9	400 kV	PATNA-BALIA	Q/C	0	800	0.0	15.5	-15.5
10	1	BIHARSHARIFF-BALIA	D/C	0	222	0.0	3.6	-3.6
11		MOTIHARI-GORAKHPUR	D/C	0	362	0.0	6.5	-6.5
12		BIHARSHARIFF-VARANASI	D/C	170	140	0.0	1.6	-1.6
13	220 kV	PUSAULI-SAHUPURI	S/C	0	149	0.0	3.1	-3.1
14	4	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	0	0	0.6	0.0	0.6
16 17	1	KARMANASA-SAHUPURI KARMANASA-CHANDAULI	S/C S/C	0	0	0.0	0.0	0.0
1/	<u> </u>	KARIMANASA CHANDAULI	3/C		ER-NR	3.4	76.3	-72.9
iport/I	Export of	ER (With WR)			1			
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	1114	0	15.5	0.0	15.5
19		NEW RANCHI-DHARAMJAIGARH	D/C	332	471	0.7	0.0	0.7
20	400 kV	JHARSUGUDA-RAIGARH BANCHI SIBAT	Q/C	681	0	9.3	0.0	9.3
21		RANCHI-SIPAT BUDHIPADAR-RAIGARH	D/C S/C	278	52	4.4 0.0	0.0	0.0
23	220 kV	BUDHIPADAR-KAIGARH BUDHIPADAR-KORBA	D/C	206	0	3.9	0.0	3.9
23	I	DODIM IDIM NORDI	D, C	200	ER-WR	33.7	0.0	33.7
		ER (With SR)			•			
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1361.0	0.0	22.0	-22.0
25 26	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	0.0	608.0 1345.0	0.0	14.6 38.3	-14.6 -38.3
27	400 kV	TALCHER-I/C	D/C	0.0	771.0	0.0	6.5	-6.5
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	0.0	74.9	-74.9
	Export of	EER (With NER)	T = .=	_	1			
29 30	400 kV	BINAGURI-BONGAIGAON	D/C D/C	99	331 192	0.0	4.8 0.5	-5 0
31	220 kV	ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C	1	84	0.0	0.9	-1
	1				ER-NER	0.0	6.1	-6.1
		NER (With NR)	1		,			1
32	HVDC	BISWANATH CHARIALI-AGRA	-	0	703 NER-NR	0.0	16.9 <b>16.9</b>	-16.9 -16.9
port/I	Export of	WR (With NR)			NEX-W	0.0	10.9	-10.9
33		CHAMPA-KURUKSHETRA	D/C	0	450	0.0	10.7	-10.7
34	HVDC	V'CHAL B/B	D/C	241	0	6.1	0.0	6.1
35	<u></u>	APL -MHG	D/C	0	594	0.0	14.6	-14.6
36		GWALIOR-AGRA	D/C	40	625	0.0	12.7	-12.7
37	1	PHAGI-GWALIOR	D/C	0	1082	0.0	14.8	-14.8
38	765 kV	JABALPUR-ORAI	D/C	304	267	0.8	0.3	0.5
39 40	1	GWALIOR-ORAI SATNA-ORAI	S/C S/C	401 0	0 1459	8.0 0.0	0.0 28.5	8.0 -28.5
40		ZERDA-KANKROLI	S/C S/C	480	0	7.8	0.0	7.8
42	1	ZERDA-RANKKOLI ZERDA -BHINMAL	S/C	426	0	5.5	0.0	5.5
43	400 kV	V'CHAL -RIHAND	S/C	489	0	11.1	0.0	11.1
		RAPP-SHUJALPUR	D/C	197	0	3	0	3
44		BADOD-KOTA	S/C	109	0	2.7	0.0	2.7
44 45	_	BADOD-MORAK	S/C	121	0	1.7	0.0	1.7
45 46	220 kV		_		0	2.3	0.0	2.3
45 46 47	220 kV	MEHGAON-AURAIYA	S/C	118				1.1
45 46 47 48	_	MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C	87	0	1.1	0.0	0.0
45 46 47	220 kV	MEHGAON-AURAIYA	S/C			1.1 0.0 50.5	0.0 0.0 81.5	0.0 -31.0
45 46 47 48 49	132kV	MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C	87	0	0.0	0.0	1
45 46 47 48 49 <b>nport/F</b> 50	132kV Export of HVDC	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B	S/C S/C S/C	87 0	0 0 WR-NR	0.0 <b>50.5</b> 0.0	0.0 <b>81.5</b> 20.7	<b>-31.0</b> -20.7
45 46 47 48 49 <b>nport/F</b> 50 51	132kV Export of	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C S/C S/C	87 0 0 0	0 0 WR-NR	0.0 50.5 0.0 0.0	0.0 <b>81.5</b> 20.7 0.0	-31.0 -20.7 0.0
45 46 47 48 49 <b>nport/F</b> 50 51	132kV Export of HVDC	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	S/C S/C S/C - - D/C	87 0 0 0 0 252	0 0 WR-NR 995 0 1140	0.0 50.5 0.0 0.0 0.0	0.0 <b>81.5</b> 20.7 0.0 14.6	-31.0 -20.7 0.0 -14.6
45 46 47 48 49 <b>nport/F</b> 50 51 52 53	132kV Export of HVDC LINK - 765 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	S/C S/C S/C S/C	0 0 0 252 0	0 0 WR-NR 995 0 1140 1859	0.0 50.5 0.0 0.0 0.0 0.0	0.0 81.5 20.7 0.0 14.6 32.9	-31.0 -20.7 0.0 -14.6 -32.9
45 46 47 48 49 50 51 52 53 54	132kV Export of HVDC LINK	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	S/C S/C S/C S/C D/C D/C D/C	0 0 0 252 0 985	0 0 WR-NR 995 0 1140 1859	0.0 50.5 0.0 0.0 0.0 0.0 0.0	0.0 <b>81.5</b> 20.7  0.0  14.6  32.9  0.0	-31.0 -20.7 0.0 -14.6 -32.9 15.1
45 46 47 48 49 <b>nport/F</b> 50 51 52 53	132kV Export of HVDC LINK - 765 kV 400 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	S/C S/C S/C S/C	0 0 0 252 0	0 0 WR-NR 995 0 1140 1859	0.0 50.5 0.0 0.0 0.0 0.0	0.0 81.5 20.7 0.0 14.6 32.9	-31.0 -20.7 0.0 -14.6 -32.9
45 46 47 48 49 50 51 52 53 54 55	132kV Export of HVDC LINK - 765 kV 400 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	S/C S/C S/C S/C S/C  D/C D/C D/C D/C	0 0 0 252 0 985	0 0 WR-NR 995 0 1140 1859 0	0.0 50.5 0.0 0.0 0.0 0.0 0.0 15.1 0.0	0.0 81.5 20.7 0.0 14.6 32.9 0.0	-31.0 -20.7 0.0 -14.6 -32.9 15.1 0.0
45 46 47 48 49 50 51 52 53 54 55 56	132kV Export of HVDC LINK - 765 kV 400 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C S/C S/C S/C S/C  D/C D/C D/C D/C S/C	87 0 0 0 252 0 985 0	0 0 WR-NR 995 0 1140 1859 0 0	0.0 50.5 0.0 0.0 0.0 0.0 0.0 15.1 0.0 0.0	0.0 81.5 20.7 0.0 14.6 32.9 0.0 0.0	-31.0 -20.7 0.0 -14.6 -32.9 15.1 0.0 0.0
45 46 47 48 49 50 51 52 53 54 55 56	132kV Export of HVDC LINK - 765 kV 400 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C S/C S/C S/C S/C S/C S/C S/C D/C D/C D/C S/C S/C	87 0 0 0 252 0 985 0	0 0 WR-NR 995 0 1140 1859 0 0 0 0 59	0.0 50.5 0.0 0.0 0.0 0.0 15.1 0.0 0.0 1.2	0.0 81.5 20.7 0.0 14.6 32.9 0.0 0.0 0.0	-31.0  -20.7  0.0  -14.6  -32.9  15.1  0.0  0.0  1.2
45 46 47 48 49 <b>port/F</b> 50 51 52 53 54 55	132kV Export of HVDC LINK - 765 kV 400 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	S/C S/C S/C S/C S/C S/C S/C S/C D/C D/C D/C S/C S/C	87 0 0 0 252 0 985 0 1	0 0 WR-NR 995 0 1140 1859 0 0 0 0 59	0.0 50.5 0.0 0.0 0.0 0.0 15.1 0.0 0.0 1.2	0.0 81.5 20.7 0.0 14.6 32.9 0.0 0.0 0.0	-31.0  -20.7  0.0  -14.6  -32.9  15.1  0.0  0.0  1.2