

## 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, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 26<sup>th</sup> 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 25.11.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 25-नवम्बर-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 25<sup>th</sup> Nov 2019, is available at the NLDC website.

धन्यवाद,

Date of Reporting

26-Nov-19

Report for previous day

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)	43415	48575	38436	17964	2331	150721
Peak Shortage (MW)	518	0	0	0	51	569
Energy Met (MU)	865	1137	892	333	40	3268
Hydro Gen (MU)	134	44	88	40	10	316
Wind Gen (MU)	10	36	53			99
Solar Gen (MU)*	29.33	21.62	83.40	1.76	0.04	136
Energy Shortage (MU)	10.5	0.0	0.0	0.0	0.8	11.3
Maximum Demand Met during the day	44247	51376	41656	18074	2312	155317
(MW) & time (from NLDC SCADA)	18:19	11:40	00:00	18:18	18:59	18:18

C	Power	Supply	v Position	in Sta	tec

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	5297	0	101.7	41.0	-1.8	110	0.0
	Haryana	5926	0	114.5	94.0	1.1	188	0.0
	Rajasthan	11424	0	216.7	62.3	-1.1	266	0.0
	Delhi	3329	0	62.5	51.6	-0.8	118	0.0
NR	UP	14185	0	260.8	112.0	0.1	1026	0.0
	Uttarakhand	1723	0	33.1	20.8	0.4	213	0.0
	HP	1589	0	27.9	19.4	0.4	91	0.0
	J&K	2187	547	44.5	37.3	-0.3	201	10.5
	Chandigarh	193	0	3.2	3.2	0.0	33	0.0
	Chhattisgarh	3412	0	71.6	20.3	-1.6	285	0.0
	Gujarat	15879	0	334.9	102.0	-0.5	506	0.0
	MP	12889	0	248.2	146.3	-2.9	419	0.0
WR	Maharashtra	20909	0	438.0	129.9	0.4	340	0.0
WK	Goa	541	0	12.3	12.1	-0.4	35	0.0
	DD	321	0	7.0	6.4	0.6	51	0.0
	DNH	790	0	18.3	18.3	0.0	53	0.0
	Essar steel	342	0	6.3	6.1	0.2	295	0.0
	Andhra Pradesh	8195	0	169.5	71.4	-0.5	523	0.0
	Telangana	8460	0	178.7	71.1	-0.1	383	0.0
SR	Karnataka	10670	0	196.3	41.2	2.8	1021	0.0
311	Kerala	3617	0	72.0	52.1	1.6	275	0.0
	Tamil Nadu	13626	0	269.1	159.8	2.1	602	0.0
	Pondy	362	0	6.8	7.3	-0.5	38	0.0
	Bihar	4023	0	66.6	68.3	-2.2	600	0.0
	DVC	2983	0	61.4	-30.6	-0.7	250	0.0
ER	Jharkhand	1226	0	24.4	18.1	-1.5	31	0.0
LIN	Odisha	3838	0	72.1	5.9	-0.4	200	0.0
	West Bengal	6162	0	107.5	29.1	1.6	300	0.0
	Sikkim	100	0	1.5	1.7	-0.2	30	0.0
	Arunachal Pradesh	112	1	2.2	2.0	0.0	36	0.0
	Assam	1338	36	22.6	16.6	0.2	114	0.8
	Manipur	181	2	2.5	2.5	0.0	21	0.0
NER	Meghalaya	332	0	5.9	2.9	0.4	43	0.0
	Mizoram	98	1	1.7	1.0	-0.1	23	0.0
	Nagaland	127	2	2.1	2.0	-0.1	23	0.0
	Tripura	222	4	3.5	1.8	-0.1	33	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	9.7	-2.1	-14.4
Day peak (MW)	616.1	-201.0	-921.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	190.0	-160.2	87.9	-115.9	-1.9	-0.1
Actual(MU)	179.5	-150.0	94.4	-120.8	-1.9	1.3
O/D/U/D(MU)	-10.5	10.2	6.6	-4.9	0.0	1.4

## F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5994	19006	7092	1290	584	33967
State Sector	11918	15271	10200	6070	11	43470
Total	17912	34277	17292	7360	596	77436

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	448	1095	421	437	12	2413
Lignite	19	18	42	0	0	79
Hydro	134	44	88	40	10	316
Nuclear	28	28	55	0	0	111
Gas, Naptha & Diesel	18	61	16	0	25	120
RES (Wind, Solar, Biomass & Others)	61	67	173	2	0	303
Total	709	1312	795	479	47	3342
Share of RES in total generation (%)	8.61	5.10	21.78	0.38	0.08	9.07
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	31.52	10.54	39.80	8.69	21.51	21.84

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.015
Based on State Max Demands	1.073

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

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

		<u>IN</u>	TER-REGI	ONAL EXCH	ANGES	Date of 1	Reporting :	26-Nov-19
								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/E		ER (With NR)						
1	765kV	GAYA-VARANASI	D/C	0	927	0.0	14.5	-14.5
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	527 386	0.0	7.6 6.5	-7.6 -6.5
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5	HVDC	PUSAULI B/B	S/C	0	196	0.0	4.8	-4.8
6	4	PUSAULI-VARANASI	S/C	0	129	0.0	2.3	-2.3
7		PUSAULI -ALLAHABAD	S/C	0	138	0.0	2.4	-2.4
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	1080 1079	0.0	16.6 20.5	-16.6 -20.5
10	400 K	BIHARSHARIFF-BALIA	D/C	0	340	0.0	5.4	-5.4
11		MOTIHARI-GORAKHPUR	D/C	0	5	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	0	379	0.0	5.2	-5.2
13	220 kV	PUSAULI-SAHUPURI	S/C	0	86	0.0	1.3	-1.3
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	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 ED ND	0.0	0.0	0.0
Import/E	xport of	ER (With WR)			ER-NR	0.4	87.0	-86.6
_	Aport Of	1	0/2	0.45		10.7	0.0	10.5
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	945	65	10.7	0.0	10.7
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	181	603 334	0.0	2.8 4.3	-2.8 -4.3
21		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	Q/C	73	312	0.0	2.5	-4.3 -2.5
22	400 kV	RANCHI-SIPAT	D/C	76	200	0.0	0.6	-0.6
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	125	0.0	1.9	-1.9
24	220 KV	BUDHIPADAR-KORBA	D/C	70	35	0.6	0.0	0.6
					ER-WR	11.3	12.2	-0.8
	_	ER (With SR)			1			
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1957.0	0.0	36.2	-36.2
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	0.0	687.0 1977.0	0.0	40.6	-11.1 -40.6
28	400 kV	TALCHER-I/C	D/C	300.0	604.0	0.0	2.3	-2.3
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
		•		**	ER-SR	0.0	87.9	-87.9
Import/E	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	295	9	5.2	0.0	5
31		ALIPURDUAR-BONGAIGAON	D/C	356	3	5.3	0.0	5
32	220 kV	ALIPURDUAR-SALAKATI	D/C	50	15 ER-NER	0.8	0.0	1
Import/F	Export of	NER (With NR)			EK-NEK	11.3	0.0	11.3
33	HVDC	BISWANATH CHARIALI-AGRA	-	375	0	9.4	0.0	9.4
	•	•			NER-NR	9.4	0.0	9.4
Import/E	Export of	WR (With NR)			•			
34		CHAMPA-KURUKSHETRA	D/C	0	480	0.0	0.0	0.0
35	HVDC	V'CHAL B/B	D/C	229	0	6.0	0.0	6.0
36		APL -MHG	D/C	0	1269	0.0	28.2	-28.2
37	ł	GWALIOR-AGRA	D/C	0	1824 1441	0.0	34.5	-34.5 -23.8
38 39	ł	PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C	653	770	0.0	23.8	-25.4
40	765 kV	GWALIOR-ORAI	S/C	644	0	12.1	0.0	12.1
41	i	SATNA-ORAI	S/C	0	1258	0.0	26.2	-26.2
42	L	CHITTORGARH-BANASKANTHA	D/C	385	409	0.5	0.0	0.5
43		ZERDA-KANKROLI	S/C	141	52	1.7	0.1	1.7
44	400 kV	ZERDA -BHINMAL	S/C	117	280	0.4	1.2	-0.9
45		V'CHAL -RIHAND	S/C	977	0	22.7	0.0	22.7
46		RAPP-SHUJALPUR	D/C	131	121	0	0	0
47		BHANPURA-RANPUR	S/C	33 52	29	0.2	0.1	0.1
40	1	DITANDID A MODAW	0.70			0.4	0.2	0.1
48	220 kV	BHANPURA-MORAK MEHGAON AUDAIYA	S/C		57		0.0	1.7
49	220 kV	MEHGAON-AURAIYA	S/C	145	0	1.7	0.0	0.5
	220 kV						0.0 0.0 0.0	1.7 0.5 0.0
49 50		MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C	145 97	0 9	1.7 0.5	0.0	0.5
49 50 51	132kV	MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C	145 97	0 9 0	1.7 0.5 0.0	0.0	0.5 0.0
49 50 51 <b>Import/E</b> 52	132kV Export of HVDC	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C S/C	145 97 0	0 9 0 WR-NR	1.7 0.5 0.0 46.4	0.0 0.0 139.7	0.5 0.0 -93.3
49 50 51 <b>Import/E</b> 52 53	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	145 97 0	0 9 0 WR-NR	1.7 0.5 0.0 46.4	0.0 0.0 139.7 15.7 0.0	0.5 0.0 -93.3 -15.7 0.0
49 50 51 <b>Import/E</b> 52 53 54	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	145 97 0 0 0 0 462	0 9 0 WR-NR 887 0 1770	1.7 0.5 0.0 46.4 0.0 0.0	0.0 0.0 139.7 15.7 0.0 18.3	0.5 0.0 -93.3 -15.7 0.0 -17.2
49 50 51 <b>Import/E</b> 52 53 54 55	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	145 97 0 0 0 0 462 1472	0 9 0 WR-NR 887 0 1770 2229	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7	0.0 0.0 139.7 15.7 0.0 18.3 30.7	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1
49 50 51 Import/E 52 53 54 55 56	132kV Export of HVDC LINK	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L-SILIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	S/C S/C S/C S/C	145 97 0 0 0 0 462 1472 846	0 9 0 WR-NR 887 0 1770 2229	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5
49 50 51 Import/E 52 53 54 55 56 57	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 D/C D/C D/C D/C	0 0 0 462 1472 846 0	0 9 0 WR-NR 887 0 1770 2229 1	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5 0.0	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5 0.0
49 50 51 Import/E 52 53 54 55 56	132kV Export of HVDC LINK 765 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L-SILIERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	S/C S/C S/C S/C	145 97 0 0 0 0 462 1472 846	0 9 0 WR-NR 887 0 1770 2229	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5 0.0	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0 0.0	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5 0.0 -1.4
49 50 51 Import/E 52 53 54 55 56 57 58	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	0 0 0 462 1472 846 0	0 9 0 WR-NR 887 0 1770 2229 1 0 74	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5 0.0	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5 0.0
49 50 51 Import/E 52 53 54 55 56 57 58	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	0 0 0 462 1472 846 0 0	0 9 0 WR-NR 887 0 1770 2229 1 0 74 83 WR-SR	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5 0.0 0.0 1.5	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0 0.0 1.4	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5 0.0 -1.4 1.5
49 50 51 Import/E 52 53 54 55 56 57 58	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	0 0 0 462 1472 846 0	0 9 0 WR-NR 887 0 1770 2229 1 0 74 83 WR-SR	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5 0.0 0.0 1.5	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0 0.0 1.4	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5 0.0 -1.4 1.5 -50.3
49 50 51 Import/E 52 53 54 55 56 57 58 59	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	0 0 0 462 1472 846 0 0	0 9 0 WR-NR 887 0 1770 2229 1 0 74 83 WR-SR	1.7 0.5 0.0 46.4 0.0 0.0 1.0 2.7 10.5 0.0 0.0 1.5	0.0 0.0 139.7 15.7 0.0 18.3 30.7 0.0 0.0 1.4	0.5 0.0 -93.3 -15.7 0.0 -17.2 -28.1 10.5 0.0 -1.4 1.5