

## 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: 13<sup>th</sup> Apr 2019

To,

- 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. मुख्य महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग 793006 Chief General Manager, 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 12.04.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 12-अप्रैल-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 12<sup>th</sup> April 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 13-Apr-19

## A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	48356	50439	45280	20635	2593	167303
Peak Shortage (MW)	653	12	0	0	32	697
Energy Met (MU)	1017	1246	1083	446	46	3837
Hydro Gen (MU)	197	51	78	57	4	388
Wind Gen (MU)	15	53	29			97
Solar Gen (MU)*	25.11	25.9	85.15	1.01	0.05	137
Energy Shortage (MU)	10.8	0.2	0.0	0.0	0.5	11.4
Maximum Demand Met during the day	48231	55129	48479	21486	2665	169053
(MW) & time (from NLDC SCADA)	19:55	14:40	15:47	19:50	18:41	19:30

B. Frequency Profile (%)
Region
All India FVI <49.7 49.7-49.8 49.8-49.9 <49.9 49.9-50.05 > 50.05 0.055 0.24 1.33 11.61 13.18 73.62 13.19

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	5584	0	126.1	40.8	-1.0	125	0.0
	Haryana	6947	156	127.1	99.1	-0.3	301	0.6
	Rajasthan	9800	0	210.6	58.3	-2.1	292	0.0
	Delhi	4507	0	94.8	78.8	-2.4	132	0.0
NR	UP	17910	0	347.0	152.7	0.8	703	0.0
	Uttarakhand	1810	0	37.8	15.0	0.4	161	0.0
	HP	1343	0	26.7	9.4	0.3	117	0.0
	J&K	1990	497	42.8	32.3	0.3	172	10.1
	Chandigarh	195	0	4.0	4.8	-0.8	7	0.0
	Chhattisgarh	4481	0	100.5	46.3	-3.3	303	0.0
	Gujarat	17262	0	389.4	119.8	3.7	422	0.0
	MP	9496	0	211.5	91.2	0.2	538	0.0
WR	Maharashtra	22423	12	501.4	147.3	-0.4	1371	0.2
WK	Goa	521	0	11.8	10.2	1.0	99	0.0
	DD	335	0	7.7	7.1	0.6	52	0.0
	DNH	812	0	18.8	18.7	0.1	59	0.0
	Essar steel	270	0	5.2	5.7	-0.5	166	0.0
	Andhra Pradesh	8918	0	192.0	62.3	-0.5	412	0.0
	Telangana	8987	0	190.1	63.6	-1.2	423	0.0
SR	Karnataka	12301	0	239.3	81.9	-1.2	449	0.0
311	Kerala	4266	0	87.3	62.6	0.9	281	0.0
	Tamil Nadu	16040	0	365.4	205.6	-1.2	480	0.0
	Pondy	425	0	8.9	9.1	-0.2	36	0.0
	Bihar	4799	0	89.7	84.6	-0.3	425	0.0
	DVC	3154	0	69.7	-38.4	0.4	345	0.0
ER	Jharkhand	1000	0	23.9	18.2	0.0	185	0.0
EN	Odisha	4290	0	89.3	30.1	1.0	398	0.0
	West Bengal	8521	0	171.8	51.4	3.0	402	0.0
	Sikkim	99	0	1.2	1.5	-0.3	20	0.0
	Arunachal Pradesh	123	1	2.3	2.4	-0.1	34	0.0
	Assam	1562	8	25.4	21.0	0.3	199	0.5
	Manipur	181	2	2.6	2.4	0.2	27	0.0
NER	Meghalaya	346	0	6.4	4.7	0.2	99	0.0
	Mizoram	97	1	1.9	1.3	0.5	15	0.0
	Nagaland	132	2	2.3	2.1	0.2	35	0.0
	Tripura	253	3	4.7	2.9	-0.1	87	0.0

 $\begin{tabular}{ll} \textbf{D. Transnational Exchanges} & \textbf{(MU) - Import(+ve)/Export(-ve)} \end{tabular}$ 

	Bhutan	Nepal	Bangladesh
Actual(MU)	8.1	-9.4	-20.8
Day peak (MW)	376.8	-559.9	-1005.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	173.2	-250.3	124.3	-46.7	-0.8	-0.2
Actual(MU)	154.9	-253.1	138.7	-41.4	1.0	0.2
O/D/U/D(MU)	-18.3	-2.8	14.4	5.3	1.8	0.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5225	11448	5472	1850	551	24545
State Sector	11170	13943	3810	2395	50	31368
Total	16395	25391	9282	4245	601	55913

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	521	1275	628	462	15	2901
Lignite	24	17	55	0	0	96
Hydro	197	51	78	57	4	388
Nuclear	20	29	32	0	0	82
Gas, Naptha & Diesel	32	62	17	0	30	141
RES (Wind, Solar, Biomass & Others)	74	84	151	1	0	310
Total	869	1518	962	521	50	3919
Share of RES in total generation (%)	8 52	5 53	15 73	0.20	0.10	7 92

Share of RES in total generation (%)	8.52	5.53	15.73	0.20	0.10	7.92
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	33.60	10.84	27.16	11.20	9.12	19.92

H. Diversity Factor
All India Demand Diversity Factor
1.041
Diversity factor = Sum of regional maximum demands / All India maximum demand

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

		INT	ER-REGI	ONAL EXCHA	ANGES	Date of 1	Reporting :	13-Apr-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	7651-37	GAYA-VARANASI	D/C	62	282	0.0	3.5	-3.5
3	765kV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	53	195 275	0.0	2.4 4.0	-2.4 -4.0
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5	HVDC	PUSAULI B/B	S/C	0	49	0.0	1.3	-1.3
6		PUSAULI-VARANASI	S/C	0	80	0.0	1.4	-1.4
7	_	PUSAULI -ALLAHABAD	S/C	22	15	0.3	0.0	0.3
8	400 1-37	MUZAFFARPUR-GORAKHPUR	D/C	0	644	0.0	8.3	-8.3
10	400 KV	PATNA-BALIA	Q/C D/C	0	689 234	0.0	12.9	-12.9 -4.2
11	_	BIHARSHARIFF-BALIA MOTIHARI-GORAKHPUR	D/C D/C	0	274	0.0	5.2	-4.2
12		BIHARSHARIFF-VARANASI	D/C	5	0	0.0	0.0	0.0
13	220 kV	PUSAULI-SAHUPURI	S/C	2	174	0.0	3.3	-3.3
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.6	0.0	0.6
16	132 KV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	1	0	0.0	0.0	0.0
					ER-NR	0.8	46.5	-45.7
Import/E	export of	ER (With WR)	, ,					1
18	_	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	1855	0	32.1	0.0	32.1
19	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	752	26	7.0	0.0	7.0
20		JHARSUGUDA-DURG	D/C	124	96	0.1	0.0	0.1
21	400 kV	JHARSUGUDA-RAIGARH	Q/C	129	228	0.2	0.0	0.2
22		RANCHI-SIPAT	D/C S/C	252 0	0	3.1 0.0	0.0	3.1
24	220 kV	BUDHIPADAR-RAIGARH BUDHIPADAR-KORBA	D/C	149	125 0	2.7	0.0	-2.1 2.7
24		BUDHIPADAR-KORBA	D/C	149	ER-WR	45.2	2.1	43.1
Import/E	Export of	ER (With SR)			ZA WA	43.2	2.1	43.1
25		ANGUL-SRIKAKULAM	D/C	0.0	1693.0	0.0	32.0	-32.0
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	695.0	0.0	15.8	-15.8
27	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	2457.0	0.0	50.6	-50.6
28	400 kV	TALCHER-I/C	D/C	0.0	645.0	0.0	5.8	-5.8
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	0.0	98.4	-98.4
	Export of	ER (With NER)			1			1
30	400 kV	BINAGURI-BONGAIGAON	D/C	381	22	3.4	0.0	3
31	****	ALIPURDUAR-BONGAIGAON	D/C	637	0	8.2	0.0	8
32	220 kV	ALIPURDUAR-SALAKATI	D/C	123	18 ER-NER	2.2 13.8	0.0	2 13.8
Import/F	Export of	NER (With NR)			ER-IVER	13.6	0.0	13.6
33	_	BISWANATH CHARIALI-AGRA	-	560	0	13.7	0.0	13.7
					NER-NR	13.7	0.0	13.7
Import/F	Export of	WR (With NR)					U	•
34		CHAMPA-KURUKSHETRA	D/C	0	1004	0.0	23.8	-23.8
35	HVDC	V'CHAL B/B	D/C	243	0	6.0	0.0	6.0
36		APL -MHG	D/C	0	1361	0.0	33.1	-33.1
37		GWALIOR-AGRA	D/C	0	2284	0.0	38.6	-38.6
38	1	PHAGI-GWALIOR	D/C	0	1077	0.0	16.6	-16.6
39	765 kV	JABALPUR-ORAI	D/C	0	726	0.0	23.6	-23.6
40	4	GWALIOR-ORAI	S/C	438	0	8.8	0.0	8.8
41	-	SATNA-ORAI	S/C	0	1391	0.0	28.1	-28.1
42	1	CHITORGARH-BANASKANTHA	D/C	428	537	0.4	0.0	0.4
43	-	ZERDA-KANKROLI ZERDA -BHINMAL	S/C	222	50 92	2.8	0.0	2.8
44	400 kV	V'CHAL -RIHAND	S/C S/C	178 969	92	0.8 22.5	0.0	0.8 22.5
45	1	RAPP-SHUJALPUR	D/C	3	358	0	2	-2
47	1	BADOD-KOTA	S/C	33	52	0.0	0.6	-0.5
• • •	4	BADOD-MORAK	S/C	0	85	0.0	1.4	-0.3
48	_		-	74			0.0	0.8
48	220 kV		S/C	/+	0	0.8		
	220 kV	MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C	41	28	0.8	0.0	0.1
49	220 kV 132kV	MEHGAON-AURAIYA			1			0.1
49 50 51	132kV	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C	41	28	0.2	0.1	
49 50 51 <b>Import/F</b>	132kV Export of	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C	0	28 0 WR-NR	0.2 0.0 42.3	0.1 0.0 <b>167.7</b>	0.0
49 50 51 <b>Import/F</b> 52	132kV Export of HVDC	MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C	0	28 0 WR-NR	0.2 0.0 42.3	0.1 0.0 <b>167.7</b>	0.0 -125.4
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	0 0	28 0 WR-NR 481	0.2 0.0 42.3 0.0 0.0	0.1 0.0 167.7 11.3 0.0	0.0 -125.4 -11.3 0.0
49 50 51 <b>Import/F</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	0 0 0 0	28 0 WR-NR 481 0 2412	0.2 0.0 42.3 0.0 0.0 0.0	0.1 0.0 167.7 11.3 0.0 40.5	0.0 -125.4 -11.3 0.0 -40.5
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 - - - D/C D/C	0 0 0 0 0	28 0 WR-NR 481 0 2412 2170	0.2 0.0 42.3 0.0 0.0 0.0 0.0	0.1 0.0 167.7 11.3 0.0 40.5 38.9	0.0 -125.4 -11.3 0.0 -40.5 -38.9
49 50 51 <b>Import/E</b> 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-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	S/C S/C S/C	0 0 0 0 0 0 548	28 0 WR-NR 481 0 2412 2170 101	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0	0.0 -125.4 -11.3 0.0 -40.5 -38.9 4.3
49 50 51 <b>Import/F</b> 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	0 0 0 0 0 0 0 548	28 0 WR-NR 481 0 2412 2170 101 0	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0	0.0 -125,4 -11.3 0.0 -40.5 -38.9 4.3 0.0
49 50 51 <b>Import/F</b> 52 53 54 55 56 57	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 KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	S/C S/C S/C	41 0 0 0 0 0 0 548 0	28 0 WR-NR 481 0 2412 2170 101 0 0	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3 0.0	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0 0.0	0.0 -125.4 -11.3 0.0 -40.5 -38.9 4.3 0.0 0.0
49 50 51 <b>Import/F</b> 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	0 0 0 0 0 0 0 548	28 0 WR-NR 481 0 2412 2170 101 0 0 68	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3 0.0 0.0 0.0	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0 0.0	0.0 -125.4 -11.3 0.0 -40.5 -38.9 4.3 0.0 0.0
49 50 51 <b>Emport/F</b> 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 PONDA-AMBEWADI XELDEM-AMBEWADI	S/C	41 0 0 0 0 0 0 548 0 1	28 0 WR-NR 481 0 2412 2170 101 0 0 68 WR-SR	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3 0.0	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0 0.0	0.0 -125.4 -11.3 0.0 -40.5 -38.9 4.3 0.0 0.0
49 50 51 mport/F 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	41 0 0 0 0 0 0 548 0	28 0 WR-NR 481 0 2412 2170 101 0 0 68 WR-SR	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3 0.0 0.0 0.0	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0 0.0	0.0 -125.4 -11.3 0.0 -40.5 -38.9 4.3 0.0 0.0 1.3 -85.1
49 50 51 <b>Import/F</b> 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 PONDA-AMBEWADI XELDEM-AMBEWADI	S/C	41 0 0 0 0 0 0 548 0 1	28 0 WR-NR 481 0 2412 2170 101 0 0 68 WR-SR	0.2 0.0 42.3 0.0 0.0 0.0 0.0 0.0 4.3 0.0 0.0 0.0	0.1 0.0 167.7 11.3 0.0 40.5 38.9 0.0 0.0	0.0 -125.4 -11.3 0.0 -40.5 -38.9 4.3 0.0 0.0