

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, कुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 21st Sep 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. 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., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 20.09.2019.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 20-सितंबर-2019 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 20th Sep 2019, is available at the NLDC website.

धन्यवाद,

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

Date of Reporting Report for previous day 21-Sep-19

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	56477	45505	39016	22635	2917	166550
Peak Shortage (MW)	2268	0	0	101	153	2522
Energy Met (MU)	1276	1020	860	485	55	3695
Hydro Gen (MU)	296	115	155	140	20	727
Wind Gen (MU)	10	32	81			123
Solar Gen (MU)*	27.52	18.1	62.24	2.12	0.04	110
Energy Shortage (MU)	12.4	0.0	0.0	0.3	0.9	13.5
Maximum Demand Met during the day	57452	46407	39140	22683	3065	167262
(MW) & time (from NLDC SCADA)	20:18	19:12	19:30	21:06	18:26	19:12

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 0.037

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	10168	0	225.2	127.4	-1.3	21	0.0
	Haryana	9443	0	200.8	146.8	-0.1	195	0.0
	Rajasthan	10630	0	242.4	76.5	-0.2	255	0.0
	Delhi	5365	0	113.4	96.1	-0.5	125	0.0
NR	UP	18375	900	375.3	164.8	-0.3	296	2.9
	Uttarakhand	1947	0	40.8	15.0	0.8	114	0.0
	HP	1498	0	29.8	5.6	0.0	211	0.0
	J&K	1927	482	42.7	20.2	-0.5	197	9.4
	Chandigarh	262	0	5.2	6.1	-0.9	34	0.0
	Chhattisgarh	4366	0	100.0	44.4	1.0	545	0.0
WR	Gujarat	14490	0	321.0	83.5	4.3	397	0.0
	MP	8047	0	173.2	75.9	-4.3	352	0.0
	Maharashtra	17897	0	383.2	145.1	-1.0	611	0.0
	Goa	541	0	11.5	10.9	0.0	34	0.0
	DD	333	0	7.4	7.0	0.4	45	0.0
	DNH	777	0	18.1	18.2	-0.1	52	0.0
	Essar steel	327	0	6.0	6.0	0.0	290	0.0
	Andhra Pradesh	7314	0	152.4	41.3	-2.1	524	0.0
	Telangana	7807	0	165.1	31.9	-1.7	578	0.0
SR	Karnataka	9106	0	177.6	43.6	-2.1	509	0.0
JI.	Kerala	3439	0	70.0	47.1	1.5	181	0.0
	Tamil Nadu	13857	0	287.2	123.2	-0.4	611	0.0
	Pondy	355	0	7.4	7.6	-0.3	39	0.0
	Bihar	5540	0	104.5	100.3	2.2	500	0.0
	DVC	2971	0	64.4	-20.8	0.0	400	0.0
ER	Jharkhand	1255	0	26.6	16.7	1.0	100	0.3
EK	Odisha	4740	0	105.0	25.9	8.2	473	0.0
	West Bengal	8913	0	183.4	68.5	0.7	500	0.0
	Sikkim	88	0	1.0	1.2	-0.3	20	0.0
	Arunachal Pradesh	125	2	2.2	2.2	0.0	26	0.0
	Assam	1890	86	35.5	31.3	1.1	209	0.8
	Manipur	161	3	2.5	2.3	0.2	20	0.0
NER	Meghalaya	368	0	5.7	1.9	0.0	51	0.0
	Mizoram	92	1	1.8	0.8	0.7	31	0.0
	Nagaland	129	2	2.2	2.4	-0.4	63	0.0
	Tripura	340	10	5.0	7.0	-0.2	54	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	42.3	-5.9	-25.6
Day peak (MW)	1840.1	-344.0	-1109.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	288.8	-228.1	15.6	-68.0	-1.8	6.6
Actual(MU)	295.9	-231.8	-3.6	-60.2	1.7	1.9
O/D/U/D(MU)	7.1	-3.8	-19.2	7.7	3.5	-4.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	3495	15185	8222	2050	56	29007
State Sector	8910	19073	8710	5250	47	41989
Total	12405	34257	16932	7300	103	70996

	NR	WR	SR	ER	NER	All India
Coal	573	990	419	424	12	2418
Lignite	22	12	43	0	0	76
Hydro	296	115	155	140	20	727
Nuclear	27	16	60	0	0	104
Gas, Naptha & Diesel	40	75	16	0	28	158
RES (Wind, Solar, Biomass & Others)	50	55	176	2	0	284
Total	1008	1263	869	567	59	3767

Share of RES in total generation (%)	5.00	4.35	20.27	0.38	0.07	7.53
Share of Non-fossil fuel (Hydro, Nuclear and	37.04	14.80	45.06	25.16	33.49	29.59
RES) in total generation (%)	37.04	14.00	43.00	23.10	33.47	29.39

H. Diversity Factor All India Demand Diversity Factor

All India Demand Diversity Factor 1.009

Diversity factor = Sum of regional maximum demands / All India maximum demand

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

		<u>IN'</u>	ΓER-REGI	ONAL EXCH	ANGES	Date of 1	Reporting :	21-Sep-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	420	0.0	6.9	-6.9
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	117 0	173 330	0.0	0.5 5.8	-0.5 -5.8
4	HVDC	ALIPURDUAR-AGRA	-	0	1200	0.0	27.3	-27.3
5	HVDC	PUSAULI B/B	S/C	0	196	0.0	4.9	-4.9
6	4	PUSAULI-VARANASI	S/C	0	172	0.0	3.3	-3.3
7	-	PUSAULI -ALLAHABAD	S/C	0	96	0.0	1.4	-1.4
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	861 880	0.0	11.9	-11.9 -18.2
10	400 K	BIHARSHARIFF-BALIA	D/C	0	230	0.0	3.3	-3.3
11	1	MOTIHARI-GORAKHPUR	D/C	0	10	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	122	174	0.0	0.4	-0.4
13	220 kV	PUSAULI-SAHUPURI	S/C	0	162	0.0	3.1	-3.1
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.5	0.0	0.5
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	1	KARMANASA-CHANDAULI	S/C	0	0 ER-NR	0.0	0.0	0.0 -86.6
Import/F	Xport of	ER (With WR)			rk-NK	0.5	87.1	-00.0
_		1	0/0	1102	0	10.0	0.0	10.0
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1193	0	19.8	0.0	19.8
19 20	1	NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	800 210	0	11.5 3.4	0.0	11.5 3.4
21		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	Q/C	298	9	3.6	0.0	3.6
22	400 kV	RANCHI-SIPAT	D/C	292	0	3.9	0.0	3.9
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	95	0.0	1.7	-1.7
24	220 KV	BUDHIPADAR-KORBA	D/C	91	0	1.3	0.0	1.3
					ER-WR	43.5	1.7	41.8
	_	ER (With SR)	1		1			т
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1169.0	0.0	18.9	-18.9
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	310.0 0.0	0.0 696.0	7.4 0.0	0.0	7.4 -14.7
28	400 kV	TALCHER-I/C	D/C	631.0	0.0	7.7	0.0	7.7
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
		•	- 1	**	ER-SR	7.4	33.6	-26.2
Import/E	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	539	0.0	9.4	-9
31		ALIPURDUAR-BONGAIGAON	D/C	0	411	0.0	3.6	-4
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	144 ER-NER	0.0	2.2	-2
Import/F	Export of	NER (With NR)			EK-NEK	0.0	15.2	-15.2
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	605	0.0	14.5	-14.5
	•	•			NER-NR	0.0	14.5	-14.5
Import/E	Export of	WR (With NR)			•			
34		CHAMPA-KURUKSHETRA	D/C	0	2009	0.0	39.7	-39.7
35	HVDC	V'CHAL B/B	D/C	453	0	12.4	0.0	12.4
36		APL -MHG	D/C	0	1740	0.0	36.4	-36.4
37 38	ł	GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C	0	2223 1296	0.0	42.2 25.2	-42.2 -25.2
39	ł	JABALPUR-ORAI	D/C D/C	0	854	0.0	32.6	-25.2
40	765 kV	GWALIOR-ORAI	S/C	303	0	6.1	0.0	6.1
41	1	SATNA-ORAI	S/C	0	1444	0.0	31.7	-31.7
42	<u></u>	CHITTORGARH-BANASKANTHA	D/C	0	906	0.0	9.2	-9.2
43		ZERDA-KANKROLI	S/C	46	126	0.1	1.1	-1.0
44	400 kV	ZERDA -BHINMAL	S/C	0	233	0.0	3.4	-3.4
45		V'CHAL -RIHAND	S/C	982	0	12.1	0.0	12.1
46		RAPP-SHUJALPUR	D/C	0	421	0	1 2	-3
47	ł	BHANPURA-RANPUR BHANPURA-MORAK	S/C S/C	0	91 145	0.0	1.3 2.2	-1.3 -2.2
48	220 kV	MEHGAON-AURAIYA	S/C S/C	79	0	0.0	0.0	0.9
50	ł	MALANPUR-AURAIYA	S/C	38	27	0.9	0.0	0.0
51	132kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
					WR-NR	31.6	228.3	-196.7
	Export of	WR (With SR)						
52	HVDC	BHADRAWATI B/B	-	192	0	4.8	0.0	4.8
	LINK	BARSUR-L.SILERU		0	0	0.0	0.0	0.0
53		SOLAPUR-RAICHUR	D/C	998	1005	5.6	3.2	2.4
54	765 kV	WADDIIA MIZAMADAD	D/C	0	1352 0	0.0 17.5	0.0	-17.7 17.5
54 55		WARDHA-NIZAMABAD KOLHAPUR-KUDGI	D/C			17.3	0.0	17.3
54 55 56	765 kV 400 kV	KOLHAPUR-KUDGI	D/C D/C	953		0.0	0.0	0.0
54 55			D/C D/C S/C	953	0 66	0.0	0.0	0.0 -0.5
54 55 56 57	400 kV	KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C	0	0			
54 55 56 57 58	400 kV	KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C S/C	0 2	0 66	0.0	0.5	-0.5
54 55 56 57 58	400 kV	KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C S/C S/C	0 2 1	0 66 38 WR-SR	0.0	0.5	-0.5 0.3
54 55 56 57 58	400 kV	KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C S/C S/C	0 2	0 66 38 WR-SR	0.0	0.5	-0.5 0.3
54 55 56 57 58 59	400 kV	KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C S/C S/C	0 2 1	0 66 38 WR-SR	0.0	0.5	-0.5 0.3 6.7