



National Load Despatch Centre
राष्ट्रीय भार प्रेषण केंद्र
POWER SYSTEM OPERATION CORPORATION LIMITED
पावर 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: 20th 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., डोंगतेह, 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 19.11.2019.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 19-नवम्बर-2019 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० की वेबसाइट पर उपलब्ध 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 19th Nov 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: 20-Nov-2019

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)	43471	47787	40137	17851	2357	151603
Peak Shortage (MW)	514	0	0	0	43	557
Energy Met (MU)	866	1097	919	341	42	3265
Hydro Gen (MU)	133	50	103	49	12	347
Wind Gen (MU)	1	19	23	0	0	43
Solar Gen (MU)*	29.03	18.10	61.29	1.79	0.03	110.24
Energy Shortage (MU)	10.6	0.0	0.0	0.0	0.4	11.0
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	44237	50030	42802	17990	2448	155581
Time Of Maximum Demand Met (From NLDC SCADA)	18:27	10:59	18:30	18:00	17:49	18:27

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	0.035	0.00	0.45	5.98	6.44	78.98	14.58

C. Power Supply Position in States

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)
NR	Punjab	5183	0	100.0	46.9	-1.9	7	0.0
	Haryana	5828	0	115.0	103.4	-0.3	113	0.0
	Rajasthan	10958	0	211.8	64.2	-0.9	588	0.0
	Delhi	3272	0	62.6	51.7	-0.7	158	0.0
	UP	14534	0	268.3	116.8	0.3	1094	0.4
	Uttarakhand	1757	0	34.1	19.1	0.7	101	0.0
	HP	1420	0	27.4	19.6	-0.4	72	0.0
	J&K	2222	556	43.5	36.1	-0.1	154	10.3
Chandigarh	193	0	3.4	3.3	0.1	18	0.0	
WR	Chhattisgarh	3469	0	70.8	28.1	0.7	425	0.0
	Gujarat	14913	0	318.4	84.1	2.5	415	0.0
	MP	11926	0	235.2	149.1	-1.9	450	0.0
	Maharashtra	20141	0	429.7	136.1	-1.8	371	0.0
	Goa	541	0	12.0	12.3	-0.9	63	0.0
	DD	328	0	7.2	6.6	0.6	64	0.0
	DNH	770	0	18.0	18.1	-0.1	35	0.0
Essar steel	296	0	5.5	5.4	0.1	242	0.0	
SR	Andhra Pradesh	8230	0	173.8	80.7	1.3	633	0.1
	Telangana	8834	0	190.6	82.0	-0.1	429	0.1
	Karnataka	9574	0	183.5	47.8	-1.5	596	0.1
	Kerala	3505	0	72.6	55.8	0.9	171	0.5
	Tamil Nadu	13950	0	291.4	176.7	3.2	544	0.1
Pondy	370	0	7.4	7.8	-0.4	18	0.0	
ER	Bihar	3977	0	67.8	63.3	-1.9	50	0.0
	DVC	3254	0	62.9	-41.2	-1.4	300	0.0
	Jharkhand	1144	0	23.9	16.3	-0.4	50	0.0
	Odisha	3859	0	73.6	9.9	-0.1	250	0.0
	West Bengal	6207	0	111.2	32.6	0.6	300	0.0
Sikkim	100	0	1.5	1.6	-0.1	20	0.0	
NER	Arunachal Pradesh	110	2	2.1	1.8	0.1	65	0.0
	Assam	1422	28	23.6	18.7	0.0	136	0.4
	Manipur	168	3	2.6	2.5	0.1	29	0.0
	Meghalaya	337	0	5.9	3.0	0.2	40	0.0
	Mizoram	96	2	1.8	0.4	0.3	16	0.0
	Nagaland	113	1	2.1	2.0	-0.2	26	0.0
Tripura	225	0	3.5	2.8	-0.6	34	0.0	

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

	BHUTAN	NEPAL	BANGLADESH
Actual (MU)	10.5	-0.8	-16.8
Day Peak (MW)	554.7	-240.6	-974.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	205.7	-204.7	116.6	-118.6	0.7	-0.4
Actual(MU)	198.8	-208.3	137.9	-135.9	-2.2	-9.8
O/D/UD(MU)	-6.9	-3.6	21.3	-17.3	-2.9	-9.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	5195	17641	7932	1850	563	33181
State Sector	13633	17655	10093	6220	11	47612
TOTAL	18828	35296	18025	8070	575	80793

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	424	1114	446	454	13	2451
Lignite	22	15	56	0	0	93
Hydro	133	50	103	49	12	347
Nuclear	28	28	55	0	0	111
Gas,Naptha&Diesel	22	57	16	0	24	119
RES,Wind,Solar,Biomass&Others	52	42	118	2	0	214
Total	682	1307	793	505	48	3335

Share of RES in total generation (%)	7.59	3.25	14.91	0.37	0.06	6.43
Share of Non-fossil fuel (Hydro,Nuclear and RES) in total generation(%)	31.29	9.19	34.84	10.12	24.30	20.17

All India Demand Diversity Factor

Based on Regional Max Demands	1.012
Based on State Max Demands	1.049

Diversity factor = Sum of regional 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: 20-Nov-2019

Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/Export of ER (With NR)								
1	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
2	HVDC	PUSAULI B/B	S/C	0	196	0.0	4.8	-4.8
3	765 kV	GAYA-VARANASI	D/C	0	913	0.0	13.4	-13.4
4	765 kV	SASARAM-FATEHPUR	S/C	0	508	0.0	7.5	-7.5
5	765 kV	GAYA-BALIA	S/C	0	443	0.0	8.2	-8.2
6	400 kV	PUSAULI-VARANASI	S/C	0	150	0.0	2.6	-2.6
7	400 kV	PUSAULI -ALLAHABAD	S/C	0	129	0.0	2.0	-2.0
8	400 kV	MUZAFFARPUR-GORAKHPUR	D/C	0	1259	0.0	19.4	-19.4
9	400 kV	PATNA-BALIA	Q/C	0	1246	0.0	24.7	-24.7
10	400 kV	BIHARSHARIFF-BALIA	D/C	0	447	0.0	8.0	-8.0
11	400 kV	MOTIHARI-GORAKHPUR	D/C	0	5	0.0	0.0	0.0
12	400 kV	BIHARSHARIFF-VARANASI	D/C	0	410	0.0	5.1	-5.1
13	220 kV	PUSAULI-SAHUPURI	S/C	0	83	0.0	1.5	-1.5
14	132 kV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.3	0.0	0.3
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	132 kV	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
ER-NR						0.3	97.2	-96.9
Import/Export of ER (With WR)								
1	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1534	0	22.4	0.0	22.4
2	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	56	650	0.0	5.7	-5.7
3	765 kV	JHARSUGUDA-DURG	D/C	45	192	0.0	2.0	-2.0
4	400 kV	JHARSUGUDA-RAIGARH	Q/C	85	197	0.0	1.2	-1.2
5	400 kV	RANCHI-SIPAT	D/C	41	200	0.0	1.2	-1.2
6	220 kV	BUDHIPADAR-RAIGARH	S/C	0	107	0.0	1.8	-1.8
7	220 kV	BUDHIPADAR-KORBA	D/C	53	39	0.3	0.0	0.3
ER-WR						22.7	12.0	10.7
Import/Export of ER (With SR)								
1	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	694	0.0	14.6	-14.6
2	HVDC	TALCHER-KOLAR BIPOLE	D/C	0	2465	0.0	50.6	-50.6
3	765 kV	ANGUL-SRIKAKULAM	D/C	0	2155	0.0	42.1	-42.1
4	400 kV	TALCHER-I/C	D/C	331	720	0.0	7.0	-7.0
5	220 kV	BALIMELA-UPPER-SILERRU	S/C	1	0	0.0	0.0	0.0
ER-SR						0.0	107.3	-107.3
Import/Export of ER (With NER)								
1	400 kV	BINAGURI-BONGAIGAON	D/C	365	61	4.3	0.0	4.3
2	400 kV	ALIPURDUAR-BONGAIGAON	D/C	402	91	4.1	0.0	4.1
3	220 kV	ALIPURDUAR-SALAKATI	D/C	71	12	0.7	0.0	0.7
ER-NER						9.1	0.0	9.1
Import/Export of NER (With NR)								
1	HVDC	BISWANATH CHARIALI-AGRA	-	462	0	7.1	0.0	7.1
NER-NR						7.1	0.0	7.1

Import/Export of WR (With NR)

Sl. No.	Voltage	Line Name	Type	Capacity (MW)	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
1	HVDC	CHAMPA-KURUKSHETRA	D/C	0	1504	0.0	29.6	-29.6
2	HVDC	V'CHAL B/B	D/C	451	0	12.1	0.0	12.1
3	HVDC	APL -MHG	D/C	0	1739	0.0	37.1	-37.1
4	765 kV	GWALIOR-AGRA	D/C	0	1649	0.0	31.0	-31.0
5	765 kV	PHAGI-GWALIOR	D/C	0	1235	0.0	18.9	-18.9
6	765 kV	JABALPUR-ORAI	D/C	571	660	0.0	21.3	-21.3
7	765 kV	GWALIOR-ORAI	S/C	538	0	10.1	0.0	10.1
8	765 kV	SATNA-ORAI	S/C	0	1235	0.0	26.7	-26.7
9	765 kV	CHITORGARH-BANASKANTHA	D/C	450	535	0.0	1.2	-1.2
10	400 kV	ZERDA-KANKROLI	S/C	149	77	1.6	0.1	1.4
11	400 kV	ZERDA -BHINMAL	S/C	141	263	0.5	1.2	-0.8
12	400 kV	V'CHAL -RIHAND	S/C	990	0	22.0	0.0	22.0
13	400 kV	RAPP-SHUJALPUR	D/C	217	88	1.6	0.0	1.6
14	220 kV	BHANPURA-RANPUR	S/C	36	48	0.1	0.2	-0.1
15	220 kV	BHANPURA-MORAK	S/C	42	45	0.3	0.2	0.1
16	220 kV	MEHGAON-AURAIYA	S/C	118	0	1.8	0.0	1.8
17	220 kV	MALANPUR-AURAIYA	S/C	69	2	0.7	0.0	0.7
18	132 kV	GWALIOR-SAWAI MADHOPUR	S/C	0	0	0.0	0.0	0.0
WR-NR						50.8	167.7	-116.9

Import/Export of WR (With SR)

1	HVDC	BHADRAWATI B/B	-	0	518	0.0	12.0	-12.0
2	HVDC	BARSUR-L.SILERU	-	0	0	0.0	0.0	0.0
3	765 kV	SOLAPUR-RAICHUR	D/C	0	2013	0.0	28.0	-28.0
4	765 kV	WARDHA-NIZAMABAD	D/C	0	2521	0.0	42.4	-42.4
5	400 kV	KOLHAPUR-KUDGI	D/C	709	86	7.7	0.0	7.7
6	220 kV	KOLHAPUR-CHIKODI	D/C	0	0	0.0	0.0	0.0
7	220 kV	PONDA-AMBEWADI	S/C	0	70	0.0	1.4	-1.4
8	220 kV	XELDEM-AMBEWADI	S/C	0	78	1.5	0.0	1.5
WR-SR						9.2	83.9	-74.6

INTERNATIONAL EXCHANGES

State	Region	Line Name	Max (MW)	Min (MW)	Avg (MW)	Energy Exchange (MU)
BHUTAN	ER	DAGACHU (2 * 63)	0	0	0	0.0
	ER	CHUKA (4 * 84) BIRPARA RECEIPT	49	28	19	0.5
	ER	MANGDECHHU (4 x 180) ALIPURDUAR RECEIPT	183	180	178	4.3
	ER	TALA (6 * 170) BINAGURI RECEIPT	281	196	243	5.8
	NER	132KV-SALAKATI - GELEPHU	10	0	-13	-0.3
	NER	132KV-RANGIA - DEOTHANG	0	0	11	0.3
NEPAL	NR	132KV-Tanakpur(NH) - Mahendranagar(PG)	0	0	0	-0.1
	ER	132KV-BIHAR - NEPAL	-152	-30	-28	-0.7
	ER	220KV-MUZAFFARPUR - DHALKEBAR DC	-70	-4	-4	-0.1
BANGLADESH	ER	Bheramara HVDC(Bangladesh)	-844	-300	-598	-14.3
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-1	65	0	-51	-1.2
	NER	132KV-SURAJMANI NAGAR - COMILLA(BANGLADESH)-2	65	0	-51	-1.2