

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: 16th Dec 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. 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 15.12.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-दिसम्बर-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 15th Dec 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day Date of Reporting 16-Dec-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 1900 hrs; from RLDCs)	41300	44002	33994	16918	2203	138417
Peak Shortage (MW)	573	0	0	0	29	602
Energy Met (MU)	819	1060	826	333	37	3075
Hydro Gen (MU)	128	37	68	37	9	279
Wind Gen (MU)	17	79	40			136
Solar Gen (MU)*	21.83	21	71.91	1.55	0.04	116
Energy Shortage (MU)	5.7	0.0	0.0	0.0	0.4	6.1
Maximum Demand Met during the day (MW) & time	41584	50817	38413	17248	2222	143873
(from NLDC SCADA)	18:53	10:58	09:11	18:22	17:46	09:11

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	0.065	0.00	1.46	3.83	5.29	60.78	33.94

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
	Punjab	4841	0	97.2	51.9	-1.0	160	0.0
	Haryana	5178	0	101.7	77.2	0.0	149	0.0
	Rajasthan	11276	0	212.7	56.7	-1.9	335	0.0
	Delhi	3819	0	62.0	51.1	-0.9	139	0.0
NR	UP	13308	0	234.2	104.5	0.4	432	0.0
	Uttarakhand	1796	0	32.7	19.1	-0.7	132	0.0
	HP	1550	0	27.6	20.1	-0.4	112	0.0
	J&K(UT) and Ladakh(UT)	2306	576	47.7	41.2	-2.4	201	5.7
	Chandigarh	215	0	3.4	3.2	0.2	33	0.0
	Chhattisgarh	3339	0	74.2	19.9	-1.1	264	0.0
	Gujarat	14483	0	299.5	79.5	0.1	610	0.0
	MP	12140	0	220.9	116.6	-4.3	419	0.0
WR	Maharashtra	20327	0	422.9	138.3	-5.8	316	0.0
WK	Goa	537	0	11.4	11.0	0.1	28	0.0
	DD	287	0	6.6	6.0	0.6	50	0.0
	DNH	772	0	18.2	18.2	0.0	33	0.0
	Essar steel	313	0	6.2	6.4	-0.2	295	0.0
	Andhra Pradesh	7569	0	154.2	71.2	0.0	321	0.0
	Telangana	9328	0	199.6	95.1	1.9	480	0.0
SR	Karnataka	9893	0	178.7	27.6	0.5	456	0.0
310	Kerala	3243	0	63.4	51.0	1.0	201	0.0
	Tamil Nadu	10657	0	223.8	111.5	-2.0	521	0.0
	Pondy	304	0	6.1	6.5	-0.4	21	0.0
	Bihar	3731	0	63.9	63.4	-0.6	240	0.0
	DVC	3006	0	61.6	-26.9	-0.1	318	0.0
ER	Jharkhand	1101	0	21.8	18.1	-2.3	31	0.0
LIX	Odisha	3892	0	75.8	18.7	0.1	220	0.0
	West Bengal	5643	0	108.3	18.7	4.8	440	0.0
	Sikkim	100	0	1.6	1.3	0.3	30	0.0
	Arunachal Pradesh	110	2	2.0	1.7	0.1	26	0.0
	Assam	1192	12	19.7	16.5	-0.1	104	0.3
	Manipur	186	3	2.5	2.9	-0.5	27	0.0
NER	Meghalaya	332	0	6.0	2.3	0.9	80	0.0
	Mizoram	99	2	1.7	0.8	0.3	21	0.0
	Nagaland	118	1	2.1	2.2	-0.4	12	0.0
	Tripura	213	1	3.4	1.6	-0.2	62	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	6.4	-4.7	-9.2
Day peak (MW)	335.1	-400.5	-727.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	204.9	-196.3	94.7	-105.4	2.0	-0.2
Actual(MU)	193.2	-199.9	96.6	-98.9	5.5	-3.6
O/D/U/D(MU)	-11.7	-3.5	1.8	6.5	3.5	-3.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5814	16363	9362	1260	694	33493
State Sector	13742	15562	9330	6510	11	45155
Total	19556	31924	18692	7770	705	78648

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	373	1052	418	401	10	2254
Lignite	24	12	38	0	0	74
Hydro	128	37	68	37	9	279
Nuclear	29	28	48	0	0	104
Gas, Naptha & Diesel	26	25	16	0	17	84
RES (Wind, Solar, Biomass & Others)	68	112	153	2	0	334
Total	647	1266	742	439	36	3130

Share of RES in total generation (%)	10.46	8.83	20.69	0.36	0.11	10.69
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	34.70	13.98	36.33	8.76	24.24	22.95

H. All India Demand Diversity Factor

Based on Regional Max Demands	1.045	
Based on State Max Demands	1.093	

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

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

		INTER-REGIONAL EXCHANGES Date of Reporting:						
								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)
	xport of	ER (With NR)	1		1			
5	HVDC	ALIPURDUAR-AGRA PUSAULI B/B	S/C	0	0 198	0.0	5.0	-5.0
1		GAYA-VARANASI	D/C	0	1056	0.0	13.6	-13.6
2	765kV	SASARAM-FATEHPUR	S/C	0	545	0.0	6.3	-6.3
3		GAYA-BALIA	S/C	0	449	0.0	7.0	-7.0
6		PUSAULI-VARANASI PUSAULI -ALLAHABAD	S/C	0	136	0.0	2.3	-2.3
7 8		MUZAFFARPUR-GORAKHPUR	S/C D/C	0	157 1009	0.0	13.6	-2.4 -13.6
9	400 kV	PATNA-BALIA	O/C	0	1009	0.0	16.8	-15.6
10		BIHARSHARIFF-BALIA	D/C	0	427	0.0	6.4	-6.4
11		MOTIHARI-GORAKHPUR	D/C	3	4	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	0	455	0.0	4.9	-4.9
13	220 kV	PUSAULI-SAHUPURI	S/C	1	86	0.0	1.0	-1.0
14		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		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0 ER-NR	0.0	0.0	0.0
mport/F	aport of	ER (With WR)			ER-IVE	0.3	74.3	-74.1
			0/2	1000	222	10.0	0.0	10.0
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1223	222	12.9	0.0	12.9
19		NEW RANCHI-DHARAMJAIGARH	D/C	470 95	437	0.0	0.1	-0.1
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	95 369	204 192	0.0 2.0	0.0	-1.1 2.0
22	400 kV	RANCHI-SIPAT	D/C	201	108	0.4	0.0	0.4
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	111	0.0	1.4	-1.4
24	220 KV	BUDHIPADAR-KORBA	D/C	151	0	1.7	0.0	1.7
					ER-WR	16.9	2.6	14.3
mport/E	xport of	ER (With SR)			_			
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	684.0	0.0	12.6	-12.6
27		TALCHER-KOLAR BIPOLE	D/C	0.0	1981.0	0.0	36.0	-36.0
25 28	765 kV 400 kV	ANGUL-SRIKAKULAM	D/C D/C	609.0	1873.0 982.0	0.0	32.0	-32.0 -0.4
29	220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.4	0.0
	220 KV	BALLINELY-CITEN-SILLIKO	5/-C	1.0	ER-SR	0.0	80.6	-80.6
mport/E	export of	ER (With NER)						1
30	400 kV	BINAGURI-BONGAIGAON	D/C	266	69	2.9	0.0	3
31	400 KV	ALIPURDUAR-BONGAIGAON	D/C	208	58	2.3	0.0	2
32	220 kV	ALIPURDUAR-SALAKATI	D/C	45	22	0.3	0.0	0
4.00		NIED (NEA ND)			ER-NER	5.5	0.0	5.5
mport/E	*	NER (With NR) BISWANATH CHARIALI-AGRA	1 . 1	488	0	11.4	0.0	11.4
33	пувс	BISWANATH CHARLALFAGRA		400	NER-NR	11.4	0.0	11.4
mport/E	xport of	WR (With NR)						
34	Ĺ	CHAMPA-KURUKSHETRA	D/C	0	1850	0.0	21.4	-21.4
35	HVDC	V'CHAL B/B	D/C	451	0	12.0	0.0	12.0
36		APL -MHG	D/C	0	888	0.0	17.1	-17.1
37		GWALIOR-AGRA	D/C	0	2422	0.0	43.7	-43.7
38]	PHAGI-GWALIOR	D/C	0	1612	0.0	19.0	-19.0
		JABALPUR-ORAI	D/C	0			26.8	-26.8
39	765 kV		D/C		814	0.0		
39 40	765 kV	GWALIOR-ORAI	S/C	652	0	9.4	0.0	9.4
39 40 41	765 kV	GWALIOR-ORAI SATNA-ORAI	S/C S/C	652 0	0 1323	9.4 0.0	0.0 27.8	9.4 -27.8
39 40 41 42	765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	S/C S/C D/C	652 0 0	0 1323 1273	9.4 0.0 0.0	0.0 27.8 12.6	9.4 -27.8 -12.6
39 40 41		GWALIOR-ORAI SATNA-ORAI	S/C S/C D/C S/C	652 0	0 1323 1273 190	9.4 0.0	0.0 27.8 12.6 0.9	9.4 -27.8
39 40 41 42 43	765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	S/C S/C D/C	652 0 0 85	0 1323 1273	9.4 0.0 0.0 0.0	0.0 27.8 12.6	9.4 -27.8 -12.6 -0.9
39 40 41 42 43 44		GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	S/C S/C D/C S/C S/C	652 0 0 85 88	0 1323 1273 190 334	9.4 0.0 0.0 0.0 0.0	0.0 27.8 12.6 0.9 2.7	9.4 -27.8 -12.6 -0.9 -2.7
39 40 41 42 43 44 45		GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	S/C S/C D/C S/C S/C S/C	652 0 0 85 88 975	0 1323 1273 190 334	9.4 0.0 0.0 0.0 0.0 0.0 22.0	0.0 27.8 12.6 0.9 2.7 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0
39 40 41 42 43 44 45 46	400 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	S/C S/C D/C S/C S/C S/C D/C	652 0 0 85 88 975	0 1323 1273 190 334 0	9.4 0.0 0.0 0.0 0.0 0.0 22.0	0.0 27.8 12.6 0.9 2.7 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0
39 40 41 42 43 44 45 46 47		GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	652 0 0 85 88 975 195	0 1323 1273 190 334 0 290 70	9.4 0.0 0.0 0.0 0.0 0.0 22.0 0 0.5	0.0 27.8 12.6 0.9 2.7 0.0 0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4
39 40 41 42 43 44 45 46 47 48 49 50	400 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46	0 1323 1273 190 334 0 290 70 142 5	9.4 0.0 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2
39 40 41 42 43 44 45 46 47 48 49	400 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88	0 1323 1273 190 334 0 290 70 142 5 28	9.4 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0
39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV - 220 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46	0 1323 1273 190 334 0 290 70 142 5	9.4 0.0 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2
39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV 220 kV 132kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3
39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV - 220 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E 52 53	220 kV 132kV 2xport of HVDC	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.9 0.3 0.0 45.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E 52 53 54	400 kV 220 kV 132kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E 52 53	220 kV 132kV 2xport of HVDC	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.9 0.3 0.0 45.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3 12.0 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E , 52 53 54 55	220 kV 132kV 2xport of HVDC 765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK 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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.5 0.0 0.9 0.3 0.0 45.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3	9.4 -27.8 -12.6 -0.9 -2.7 -22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3 -12.0 0.0 -16.4 -35.7
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E : 52 53 54 55 56	220 kV 132kV 2xport of HVDC 765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0 0 0 0 654	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0 0.2 1.6 0.0 0.1 0.0 174.3 12.0 0.0 16.4 35.7 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0.4 -1.6 0.9 0.2 0.0 -129.3 -12.0 0.0 -16.4 -35.7
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E: 52 53 54 55 56 57	220 kV 132kV 2xport of HVDC 765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK 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 D/C S/C S/C S/C S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0 0 0 0 0 0 654 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR 985 0 1464 2116 0 0	9.4 0.0 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0 0.2 1.6 0.0 0.1 0.0 174.3 12.0 0.0 164 35.7 0.0 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3 -12.0 0.0 -16.4 -35.7 11.3 0.0
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E : 52 53 54 55 55 56	220 kV 132kV 2xport of HVDC 765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	652 0 0 85 88 975 195 18 0 88 46 0 0 0 654 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR	9.4 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0 0.0 0.0 0.0 0.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3 12.0 0.0 16.4 35.7 0.0 0.0 1.3	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3 -12.0 0.0 -16.4 -35.7 11.3 0.0 -1.3
39 40 41 42 43 44 45 46 47 48 49 50 51 mport/E : 52 53 54 55 56 57	220 kV 132kV 2xport of HVDC 765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK 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	652 0 0 85 88 975 195 18 0 88 46 0 0 0 654 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR 985 0 1464 2116 0 0 65 72 WR-SR	9.4 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0 0.0 0.0 0.0 0.0 11.3 0.0 0.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3 12.0 0.0 16.4 35.7 0.0 0.0 1.3 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3 -12.0 0.0 -16.4 -35.7 11.3 0.0 -1.3
39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	220 kV 132kV 2xport of HVDC 765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK 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	652 0 0 85 88 975 195 18 0 88 46 0 0 0 0 654 0 0	0 1323 1273 190 334 0 290 70 142 5 28 0 WR-NR 985 0 1464 2116 0 0 65 72 WR-SR	9.4 0.0 0.0 0.0 0.0 22.0 0 0.5 0.0 0.9 0.3 0.0 45.0 0.0 0.0 0.0 0.0 11.3 0.0 0.0	0.0 27.8 12.6 0.9 2.7 0.0 0 0.2 1.6 0.0 0.1 0.0 174.3 12.0 0.0 16.4 35.7 0.0 0.0 1.3 0.0	9.4 -27.8 -12.6 -0.9 -2.7 22.0 0 0.4 -1.6 0.9 0.2 0.0 -129.3 -12.0 0.0 -16.4 -35.7 11.3 0.0 -1.3