

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 09th Dec 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 ७९३००६ Executive Director, 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 08.12.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 08-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 08th Dec 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day

A. Power Supply Position at All India and Regional level

Date of Reporting 9-Dec-19

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	41678	45239	33696	17346	2262	140221
Peak Shortage (MW)	596	0	83	0	41	720
Energy Met (MU)	846	1102	795	335	39	3118
Hydro Gen (MU)	133	49	86	37	9	314
Wind Gen (MU)	15	62	37			114
Solar Gen (MU)*	29.03	21.4	55.95	1.54	0.04	108
Energy Shortage (MU)	10.7	0.0	0.0	0.0	0.4	11.0
Maximum Demand Met during the day	41928	52446	35801	17337	2355	144911
(MW) & time (from NLDC SCADA)	18:44	11:01	09:21	18:32	17:32	09:28

C. Power	Suppl	y Posi	ition	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	5321	0	108.5	51.6	-1.3	90	0.0
	Haryana	5267	0	109.0	92.6	1.3	302	0.0
	Rajasthan	12149	0	219.8	64.4	-1.4	376	0.0
	Delhi	3548	0	59.3	48.4	-0.8	158	0.0
NR	UP	13344	0	242.3	100.9	1.7	587	0.0
	Uttarakhand	1781	0	32.1	15.8	-0.4	102	0.0
	HP	1521	0	26.4	19.4	-0.6	117	0.0
	J&K	2411	603	45.4	39.6	-0.6	201	10.7
	Chandigarh	192	0	3.1	3.2	-0.1	23	0.0
	Chhattisgarh	3388	0	73.0	15.5	-1.1	242	0.0
	Gujarat	14968	0	312.0	86.3	-1.4	738	0.0
	MP	13561	0	252.3	146.4	-4.4	419	0.0
14/0	Maharashtra	20562	0	421.6	134.7	-5.2	476	0.0
WR	Goa	541	0	12.3	10.8	0.9	54	0.0
	DD	293	0	6.7	6.1	0.6	41	0.0
	DNH	767	0	18.2	18.2	0.0	80	0.0
	Essar steel	306	0	5.7	5.3	0.4	295	0.0
	Andhra Pradesh	7139	-21	150.3	75.9	-0.8	462	0.0
	Telangana	8409	0	175.6	78.8	1.5	478	0.0
SR	Karnataka	9168	-11	169.7	45.8	2.2	835	0.0
311	Kerala	3305	0	64.7	52.8	1.3	194	0.0
	Tamil Nadu	10634	0	229.0	127.2	0.2	1167	0.0
	Pondy	302	0	6.2	6.4	-0.2	46	0.0
	Bihar	3951	0	67.6	66.6	-0.4	350	0.0
	DVC	2921	0	60.3	-25.8	1.8	340	0.0
ER	Jharkhand	1161	0	24.3	16.1	-0.4	31	0.0
	Odisha	3888	0	73.8	8.0	1.3	290	0.0
	West Bengal	5549	0	107.6	21.7	0.9	320	0.0
	Sikkim	100	0	1.4	1.3	0.1	20	0.0
	Arunachal Pradesh	118	2	2.1	2.0	-0.1	72	0.0
	Assam	1272	22	21.1	15.9	0.2	123	0.3
	Manipur	188	3	2.5	2.8	-0.3	26	0.0
NER	Meghalaya	337	0	6.1	2.9	0.5	68	0.0
	Mizoram	98	1	1.7	0.9	0.2	20	0.0
	Nagaland	119	2	2.2	2.2	-0.2	8	0.0
	Tripura	215	0	3.5	2.0	-0.1	38	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	6.1	-4.8	-9.8
Day peak (MW)	566.9	-353.2	-756.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	190.7	-182.5	93.0	-98.7	-2.5	0.0
Actual(MU)	182.9	-174.3	98.7	-111.1	0.7	-3.0
O/D/U/D(MU)	-7.8	8.2	5.8	-12.4	3.2	-3.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5853	19611	7612	2740	589	36404
State Sector	13680	17778	12720	5850	11	50039
Total	19533	37388	20332	8590	600	86443

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	409	1069	367	424	10	2280
Lignite	24	17	44	0	0	85
Hydro	133	49	86	37	9	314
Nuclear	19	28	58	0	0	104
Gas, Naptha & Diesel	24	39	15	0	24	101
RES (Wind, Solar, Biomass & Others)	71	96	134	2	0	302
Total	680	1298	703	462	43	3187
Share of RES in total generation (%)	10.41	7.40	19.03	0.34	0.09	9.49
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	32.80	13.32	39.42	8.25	21.38	22.61

H. All India Demand Diversity Factor

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Based on Regional Max Demands	1.034				
Based on State Max Demands	1.096				

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

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

		<u>IN</u>	TER-REGIO	ONAL EXCHA	ANGES	Date of I	Reporting :	9-Dec-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	829	0.0	12.2	-12.2
3	705KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	445 419	0.0	7.5	-6.0 -7.5
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	131	0.0	2.3	-2.3
7		PUSAULI -ALLAHABAD	S/C	0	151	0.0	2.3	-2.3
8	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	968 931	0.0	13.4	-13.4 -17.3
10	400 K	BIHARSHARIFF-BALIA	D/C	0	419	0.0	7.1	-7.1
11	1	MOTIHARI-GORAKHPUR	D/C	0	10	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	0	380	0.0	4.3	-4.3
13	220 kV	PUSAULI-SAHUPURI	S/C	2	52	0.0	0.6	-0.6
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	vnort of	ER (With WR)			ER-NR	0.4	77.7	-77.3
-	Aport Of	· · · · · · · · · · · · · · · · · · ·	6.0	4	001	0.0	2 -	
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	446	894	0.0	3.7	-3.7
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	471 0	382 324	0.9	0.0 4.8	0.9 -4.8
21		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	Q/C	158	396	0.0	2.3	-2.3
22	400 kV	RANCHI-SIPAT	D/C	180	144	0.5	0.0	0.5
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	140	0.0	2.1	-2.1
24	220 KV	BUDHIPADAR-KORBA	D/C	120	38	1.3	0.0	1.3
					ER-WR	2.8	12.8	-10.1
	_	ER (With SR)	1		1			
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	2212.0	0.0	38.2	-38.2
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B	D/C D/C	0.0	525.0 1969.0	0.0	12.3 27.3	-12.3 -27.3
28	400 kV	TALCHER-KOLAR BIPOLE TALCHER-I/C	D/C D/C	812.0	345.0	11.0	0.0	11.0
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
	22011		1	1.0	ER-SR	0.0	77.8	-77.8
Import/E	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	298	18	4.6	0.0	5
31		ALIPURDUAR-BONGAIGAON	D/C	373	0	5.2	0.0	5
32	220 kV	ALIPURDUAR-SALAKATI	D/C	64	20	0.8	0.0	1
Import/F	Export of	NER (With NR)			ER-NER	10.6	0.0	10.6
33	HVDC	BISWANATH CHARIALI-AGRA	1.1	489	0	11.6	0.0	11.6
33	11.50			1.05	NER-NR	11.6	0.0	11.6
Import/E	Export of	WR (With NR)				<u>'</u>		
34		CHAMPA-KURUKSHETRA	D/C	0	484	0.0	12.2	-12.2
35	HVDC	V'CHAL B/B	D/C	452	0	12.1	0.0	12.1
36		APL -MHG	D/C	0	1551	0.0	38.1	-38.1
37	1	GWALIOR-AGRA	D/C	0	2031	0.0	37.5	-37.5
38	ł	PHAGI-GWALIOR	D/C	0		~ ~		-19.3
			D/C	^	1363	0.0	19.3	
39	765 kV	JABALPUR-ORAI GWALIOR-ORAI	D/C S/C	0	938	0.0	21.8	-21.8
39 40	765 kV	GWALIOR-ORAI	S/C	596	938 0	0.0 8.5	21.8 0.0	-21.8 8.5
39	765 kV				938	0.0	21.8	-21.8
39 40 41	765 kV	GWALIOR-ORAI SATNA-ORAI	S/C S/C	596 0	938 0 1405	0.0 8.5 0.0	21.8 0.0 27.5	-21.8 8.5 -27.5
39 40 41 42		GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	S/C S/C D/C	596 0 0	938 0 1405 890	0.0 8.5 0.0 0.0	21.8 0.0 27.5 5.6	-21.8 8.5 -27.5 -5.6
39 40 41 42 43	765 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	S/C S/C D/C S/C S/C S/C	596 0 0 95 97 986	938 0 1405 890 128 275	0.0 8.5 0.0 0.0 0.1 0.0 22.6	21.8 0.0 27.5 5.6 0.0 1.6 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6
39 40 41 42 43 44 45 46		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	596 0 0 95 97 986 114	938 0 1405 890 128 275 0	0.0 8.5 0.0 0.0 0.1 0.0 22.6	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6
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	596 0 0 95 97 986 114 0	938 0 1405 890 128 275 0 156	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2
39 40 41 42 43 44 45 46 47 48		GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	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	596 0 0 95 97 986 114 0	938 0 1405 890 128 275 0 156 81 163	0.0 8.5 0.0 0.1 0.0 22.6 0 0.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2
39 40 41 42 43 44 45 46 47 48	400 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -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	596 0 0 95 97 986 114 0 0 113	938 0 1405 890 128 275 0 156 81 163 0	0.0 8.5 0.0 0.1 0.0 22.6 0 0.1 0.0	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2
39 40 41 42 43 44 45 46 47 48 49 50	- 400 kV - 220 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -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	596 0 0 95 97 986 114 0 0 113 69	938 0 1405 890 128 275 0 156 81 163 0 8	0.0 8.5 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5
39 40 41 42 43 44 45 46 47 48	400 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -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	596 0 0 95 97 986 114 0 0 113	938 0 1405 890 128 275 0 156 81 163 0	0.0 8.5 0.0 0.1 0.0 22.6 0 0.1 0.0	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5
39 40 41 42 43 44 45 46 47 48 49 50	400 kV 220 kV	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -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	596 0 0 95 97 986 114 0 0 113 69	938 0 1405 890 128 275 0 156 81 163 0 8	0.0 8.5 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5
39 40 41 42 43 44 45 46 47 48 49 50	400 kV 220 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	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	596 0 0 95 97 986 114 0 0 113 69	938 0 1405 890 128 275 0 156 81 163 0 8	0.0 8.5 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5
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 VCHAL -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	596 0 0 95 97 986 114 0 0 113 69	938 0 1405 890 128 275 0 156 81 163 0 8 0 WR-NR	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0 3 2.2 0.0 0.0 1.6 0.0 0 1.6 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E	- 400 kV - 220 kV - 132kV - Export of - HVDC - LINK	GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WORAK 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	596 0 0 95 97 986 114 0 0 113 69 0	938 0 1405 890 128 275 0 156 81 163 0 WR-NR	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0 166.2	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55	400 kV 220 kV 132kV Export of HVDC LINK 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	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0	938 0 1405 890 128 275 0 156 81 163 0 8 0 WR-NR	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0 0.3 2.2 0.0 0.0 0.0 166.2 15.6 0.0 20.3 37.1	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	- 400 kV - 220 kV - 132kV - Export of - HVDC - LINK	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	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	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673	938 0 1405 890 128 275 0 156 81 163 0 8 0 WR-NR	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 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 S/C S/C S/C S/C S/C S	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673 0	938 0 1405 890 128 275 0 156 81 163 0 8 0 WR-NR	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1 -15.6 0.0 -20.0 -37.1 9.9 0.0
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	400 kV 220 kV 132kV Export of HVDC LINK 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 PONDA-AMBEWADI	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	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673 0	938 0 1405 890 128 275 0 156 81 163 0 WR-NR 1006 0 1749 2102 0 0 56	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5 0.0 45.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0.3 2.2 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1 -15.6 0.0 -20.0 -37.1 9.9 0.0 -1.0
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 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 S/C S/C S/C S/C S/C S	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673 0	938 0 1405 890 128 275 0 156 81 163 0 WR-NR 1006 0 1749 2102 0 0 56 64	0.0 8.5 0.0 0.0 0.1 0.0 0.1 0.0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0 0.0 0.0 1.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1 -15.6 0.0 -20.0 -37.1 9.9 0.0 -1.0 1.2
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 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-SAMBEWADI	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	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673 0 0	938 0 1405 890 128 275 0 156 81 163 0 WR-NR 1006 0 1749 2102 0 0 56 64 WR-SR	0.0 8.5 0.0 0.0 0.1 0.0 22.6 0 0.1 0.0 1.2 0.5 0.0 45.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0.3 2.2 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0 0.0 1.0 1.0 1.0 1.0 1.0 1	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1 -15.6 0.0 -20.0 -37.1 9.9 0.0 -1.0
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 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-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	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	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673 0	938 0 1405 890 128 275 0 156 81 163 0 WR-NR 1006 0 1749 2102 0 0 56 64 WR-SR	0.0 8.5 0.0 0.0 0.1 0.0 0.1 0.0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0 0.0 0.0 1.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1 -15.6 0.0 -20.0 -37.1 9.9 0.0 -1.0 1.2 -62.8
39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV Export of HVDC LINK - 765 kV 400 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-SAMBEWADI	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	596 0 0 95 97 986 114 0 0 113 69 0 0 0 278 0 673 0 0	938 0 1405 890 128 275 0 156 81 163 0 WR-NR 1006 0 1749 2102 0 0 56 64 WR-SR	0.0 8.5 0.0 0.0 0.1 0.0 0.1 0.0 0.1 0.0 1.2 0.5 0.0 45.1	21.8 0.0 27.5 5.6 0.0 1.6 0.0 0 0.3 2.2 0.0 0.0 166.2 15.6 0.0 20.3 37.1 0.0 0.0 0.0 1.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.8 8.5 -27.5 -5.6 0.1 -1.6 22.6 0 -0.2 -2.2 1.2 0.5 0.0 -121.1 -15.6 0.0 -20.0 -37.1 9.9 0.0 -1.0 1.2