

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: 19th 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 793006 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 18.12.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 18-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 18th Dec 2019, is available at the NLDC website.

धन्यवाद,

Report for previous day Date of Reporting 19-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)	46721	48209	38637	17834	2353	153754
Peak Shortage (MW)	763	0	0	0	26	789
Energy Met (MU)	912	1106	916	341	40	3315
Hydro Gen (MU)	122	47	84	39	9	300
Wind Gen (MU)	8	64	55			128
Solar Gen (MU)*	28.45	20.22	65.29	2.10	0.04	116
Energy Shortage (MU)	12.6	0.1	0.0	0.0	0.3	13.0
Maximum Demand Met during the day (MW) & time	46969	51553	44135	18074	2482	155993
(from NLDC SCADA)	18:36	10:27	07:53	18:23	17:26	18:29

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	0.036	0.00	0.58	4.35	4.93	73.53	21.54

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	5656	0	109.4	58.2	-1.2	112	0.0
	Haryana	6515	0	120.7	91.8	0.4	229	0.5
	Rajasthan	12191	0	223.2	61.8	2.1	593	0.0
	Delhi	4162	0	70.2	56.2	-1.6	235	0.0
NR	UP	14136	55	263.3	106.2	0.7	783	0.0
	Uttarakhand	2021	0	39.3	21.7	0.9	170	0.3
	HP	1703	0	31.5	23.0	1.2	312	0.0
	J&K(UT) and Ladakh(UT)	2551	638	50.2	42.8	2.1	463	11.9
	Chandigarh	256	0	4.4	4.2	0.3	44	0.0
	Chhattisgarh	3461	0	76.2	17.9	0.0	271	0.0
	Gujarat	14780	0	316.4	89.4	0.4	793	0.0
	MP	12056	0	224.1	109.9	-2.9	412	0.0
WR	Maharashtra	21743	0	444.6	132.8	-0.2	435	0.0
WK	Goa	580	0	12.4	11.7	0.1	34	0.1
	DD	330	0	7.4	6.9	0.5	48	0.0
	DNH	814	0	18.8	18.8	0.1	46	0.0
	Essar steel	308	0	5.8	6.0	-0.2	238	0.0
	Andhra Pradesh	7831	0	160.2	68.3	0.3	571	0.0
	Telangana	10429	0	211.7	109.7	0.8	534	0.0
SR	Karnataka	10941	0	196.4	36.7	-0.4	505	0.0
311	Kerala	3541	0	69.8	55.7	1.4	283	0.0
	Tamil Nadu	13471	0	270.6	140.1	-0.3	601	0.0
	Pondy	360	0	7.1	7.5	-0.3	21	0.0
	Bihar	3991	0	71.0	67.7	1.7	150	0.0
	DVC	3123	0	63.7	-33.7	0.1	100	0.0
ER	Jharkhand	1272	0	23.9	15.7	-1.2	50	0.0
LIN	Odisha	3712	0	69.3	13.6	-0.7	180	0.0
	West Bengal	6188	0	111.2	34.7	2.7	380	0.0
	Sikkim	121	0	1.8	1.6	0.2	25	0.0
	Arunachal Pradesh	120	2	2.1	1.7	0.2	60	0.0
	Assam	1379	18	22.0	17.8	0.1	124	0.2
	Manipur	203	1	2.6	2.9	-0.3	42	0.0
NER	Meghalaya	347	0	6.0	2.9	0.4	80	0.0
	Mizoram	101	1	1.8	1.1	0.1	39	0.0
	Nagaland	128	2	2.2	2.3	-0.3	16	0.0
	Tripura	227	4	3.5	1.6	-0.4	28	0.0

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

The state of the s	Bhutan	Nepal	Bangladesh
Actual(MU)	6.3	-7.0	-9.6
Day peak (MW)	294.3	-428.2	-750.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	215.1	-223.2	114.9	-109.7	2.8	0.0
Actual(MU)	222.8	-242.6	119.6	-103.9	1.8	-2.4
O/D/U/D(MU)	7.7	-19.4	4.7	5.7	-1.1	-2.4

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4671	18693	8552	1260	651	33827
State Sector	11682	16581	8630	6700	11	43604
Total	16353	35273	17182	7960	663	77431

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	438	1129	457	423	12	2458
Lignite	25	15	44	0	0	83
Hydro	122	47	84	39	9	300
Nuclear	29	28	44	0	0	101
Gas, Naptha & Diesel	32	33	16	0	22	104
RES (Wind, Solar, Biomass & Others)	65	97	167	2	0	331
Total	711	1348	812	464	43	3377
CI EDECT COLUMN	0.40		40.50	0.46	0.00	0.04

Share of RES in total generation (%)	9.18	7.17	20.59	0.46	0.09	9.81
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	30.37	12.70	36.37	8.81	21.20	21.69

H. All India Demand Diversity Factor

III III III III Deliiiii Diversity I uctor		
Based on Regional Max Demands	1.046	
Based on State Max Demands	1.095	

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.$

		IN	ΓER-REGI	ONAL EXCH	ANGES	Date of I	Reporting :	19-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)
	Export of	ER (With NR)						
5	HVDC	ALIPURDUAR-AGRA PUSAULI B/B	S/C	0	0 198	0.0	0.0 4.9	0.0 -4.9
1		GAYA-VARANASI	D/C	0	1177	0.0	14.8	-14.8
2	765kV	SASARAM-FATEHPUR	S/C	0	501	0.0	5.9	-5.9
6		GAYA-BALIA PUSAULI-VARANASI	S/C S/C	0	143	0.0	4.2 2.5	-4.2 -2.5
7		PUSAULI -ALLAHABAD	S/C	0	138	0.0	2.2	-2.2
8		MUZAFFARPUR-GORAKHPUR	D/C	0	895	0.0	12.6	-12.6
9	400 kV	PATNA-BALIA	Q/C	0	1123	0.0	18.4	-18.4
10		BIHARSHARIFF-BALIA	D/C	0	467	0.0	7.0	-7.0
11		MOTIHARI-GORAKHPUR BIHARSHARIFF-VARANASI	D/C D/C	0	5 380	0.0	0.0 4.0	0.0 -4.0
13	220 kV	PUSAULI-SAHUPURI	S/C	9	63	0.0	0.5	-0.5
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	152 K	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	Export of	ER (With WR)			ER-NR	0.3	72.1	-71.8
18		<u> </u>	O/C	1270	420	11.1	0.0	11.1
	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C		420			11.1
19 20	-	NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	438 10	503 371	0.0	0.4 2.0	-0.4 -2.0
21	400 kV	JHARSUGUDA-RAIGARH	Q/C	328	51	3.0	0.0	3.0
22	400 KV	RANCHI-SIPAT	D/C	185	263	0.2	0.0	0.2
23	220 kV	BUDHIPADAR-RAIGARH	S/C	29 155	91	0.0 2.2	1.0	-1.0
24	l	BUDHIPADAR-KORBA	D/C	155	0 ER-WR	16.5	0.0 3.4	2.2
Import/F	Export of	ER (With SR)				10.5	3.4	10.1
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	625.0	0.0	14.7	-14.7
27		TALCHER-KOLAR BIPOLE	D/C	0.0	2478.0	0.0	45.0	-45.0
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1987.0	0.0	34.1	-34.1
28 29	400 kV 220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	717.0	0.0	0.0	4.3 0.0	-4.3 0.0
27	220 K	BALIMELA-OTT EK-SILLAKO	B/C	1.0	ER-SR	0.0	93.8	-93.8
Import/F	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	241	38	3.1	0.0	3
31		ALIPURDUAR-BONGAIGAON	D/C	275	0	3.9	0.0	4
32	220 kV	ALIPURDUAR-SALAKATI	D/C	55	44 ER-NER	0.4 7.4	0.0	7.4
Import/E	Export of	NER (With NR)			ER-IVER	7.4	0.0	7.4
33	HVDC	BISWANATH CHARIALI-AGRA	-	485	0	10.0	0.0	10.0
					NER-NR	10.0	0.0	10.0
_	Export of	WR (With NR)			1525	0.0	27.0	27.0
34 35	HVDC	CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	230	1727 490	0.0 2.3	27.0 5.7	-27.0 -3.4
36	11120	APL -MHG	D/C	0	1556	0.0	26.5	-26.5
37		GWALIOR-AGRA	D/C	0	2438	0.0	45.4	-45.4
38		PHAGI-GWALIOR	D/C	0	1682	0.0	23.7	-23.7
39	765 kV	JABALPUR-ORAI	D/C	0	820	0.0	29.6	-29.6
40	-	GWALIOR-ORAI	S/C	702	1429	10.9	0.0	10.9
41	-	SATNA-ORAI CHITTORGARH-BANASKANTHA	S/C D/C	104	1428 849	0.0	30.0 4.9	-30.0 -4.9
42		ZERDA-KANKROLI	S/C	104	104	0.0	0.0	0.4
	4	l						-2.0
44	400 1-37	ZERDA -BHINMAL	S/C	73	309	0.0	2.0	
45	400 kV	V'CHAL -RIHAND	S/C	976	0	0.0 22.2	0.0	22.2
45 46	400 kV	V'CHAL -RIHAND RAPP-SHUJALPUR	S/C D/C	976 137	0 335	22.2	0.0	-1
45 46 47	400 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C D/C S/C	976 137 20	0 335 70	22.2 0 0.6	0.0 1 0.1	-1 0.5
45 46 47 48	400 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	S/C D/C S/C S/C	976 137 20 3	0 335 70 125	22.2 0 0.6 0.0	0.0 1 0.1 1.6	-1 0.5 -1.6
45 46 47	-	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	S/C D/C S/C	976 137 20	0 335 70	22.2 0 0.6	0.0 1 0.1	-1 0.5
45 46 47 48 49	-	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	S/C D/C S/C S/C S/C	976 137 20 3 83	0 335 70 125 0	22.2 0 0.6 0.0 0.9	0.0 1 0.1 1.6 0.0	-1 0.5 -1.6 0.9
45 46 47 48 49 50 51	220 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	S/C D/C S/C S/C S/C S/C	976 137 20 3 83 32	0 335 70 125 0 28	22.2 0 0.6 0.0 0.9 0.1	0.0 1 0.1 1.6 0.0 0.2	-1 0.5 -1.6 0.9 -0.1
45 46 47 48 49 50 51	220 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	S/C D/C S/C S/C S/C S/C	976 137 20 3 83 32 0	0 335 70 125 0 28 0 WR-NR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3
45 46 47 48 49 50 51 Import/F	220 kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C D/C S/C S/C S/C S/C S/C S/C -	976 137 20 3 83 32 0	0 335 70 125 0 28 0 WR-NR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3
45 46 47 48 49 50 51 Import/E 52 53	220 kV 132kV Export of HVDC	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	S/C D/C S/C S/C S/C S/C S/C S/C S/C	976 137 20 3 83 32 0	0 335 70 125 0 28 0 WR-NR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3
45 46 47 48 49 50 51 Import/F	220 kV 132kV	V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	S/C D/C S/C S/C S/C S/C S/C S/C -	976 137 20 3 83 32 0	0 335 70 125 0 28 0 WR-NR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3
45 46 47 48 49 50 51 Import/E 52 53	220 kV 132kV Export of HVDC	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	S/C D/C S/C S/C S/C S/C S/C - D/C	976 137 20 3 83 32 0 0 0 472	0 335 70 125 0 28 0 WR-NR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC - 765 kV 400 kV	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	S/C D/C S/C S/C S/C S/C S/C S/C S/C D/C D/C D/C	976 137 20 3 83 32 0 0 0 472 0 746 0	0 335 70 125 0 28 0 WR-NR 505 0 1908 2350 0 0	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0 0.7 0.0 9.2 0.0	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1 43.1 0.0	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4 -43.1 9.2 0.0
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV Export of HVDC - 765 kV	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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	976 137 20 3 83 32 0 0 472 0 746 0 0	0 335 70 125 0 28 0 WR-NR 505 0 1908 2350 0 0 103	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0 0.7 0.0 0.7 0.0 0.7	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1 43.1 0.0 0.0 1.4	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4 -43.1 9.2 0.0 -1.4
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV Export of HVDC - 765 kV 400 kV	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	S/C D/C S/C S/C S/C S/C S/C D/C D/C D/C D/C D/C D/C	976 137 20 3 83 32 0 0 0 472 0 746 0	0 335 70 125 0 28 0 WR-NR 505 0 1908 2350 0 0	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0 0.7 0.0 0.7 0.0 0.0 0.0	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1 43.1 0.0 0.0 1.4	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4 -43.1 9.2 0.0 -1.4 1.6
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV Export of HVDC - 765 kV 400 kV	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 XELDEM-AMBEWADI	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	976 137 20 3 83 32 0 0 472 0 746 0 0 0	0 335 70 125 0 28 0 WR-NR 505 0 1908 2350 0 0 103 115 WR-SR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0 0.7 0.0 0.7 0.0 0.7	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1 43.1 0.0 0.0 1.4	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4 -43.1 9.2 0.0 -1.4
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV Export of HVDC - 765 kV 400 kV	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 XELDEM-AMBEWADI	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	976 137 20 3 83 32 0 0 472 0 746 0 0	0 335 70 125 0 28 0 WR-NR 505 0 1908 2350 0 0 103 115 WR-SR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0 0.7 0.0 0.7 0.0 0.0 0.0	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1 43.1 0.0 0.0 1.4	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4 -43.1 9.2 0.0 -1.4 1.6 -68.9
45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV Export of HVDC - 765 kV 400 kV	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 XELDEM-AMBEWADI	S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	976 137 20 3 83 32 0 0 472 0 746 0 0 0	0 335 70 125 0 28 0 WR-NR 505 0 1908 2350 0 0 103 115 WR-SR	22.2 0 0.6 0.0 0.9 0.1 0.0 37.5 0.0 0.0 0.7 0.0 0.7 0.0 0.0 0.0	0.0 1 0.1 1.6 0.0 0.2 0.0 197.7 11.8 0.0 24.1 43.1 0.0 0.0 1.4	-1 0.5 -1.6 0.9 -0.1 0.0 -160.3 -11.8 0.0 -23.4 -43.1 9.2 0.0 -1.4 1.6