

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 23rd Jan 2018

Τо

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, Kolkata, 700033
- 2. महाप्रबंधक, ऊ. क्षे. भा. प्रे. के., 18/ ए, शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 General Manager, 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. महाप्रबंधक , द .क्षे .भा .प्रे .के., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ General Manager, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 23.01.2018.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 23-जनवरी - 2018 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 23rd January 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day 24-Jan-18

A. Maximum Demand

11. Mammam Demana						
	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	39444	45345	40865	18211	2414	146279
Peak Shortage (MW)	555	0	0	0	46	601
Energy Met (MU)	876	1065	920	356	41	3258
Hydro Gen(MU)	98	27	84	26	8	243
Wind Gen(MU)	9	38	15			63
Solar Gen (MU)*	6.76	15.85	42.80	0.58	0.02	66
Energy Shortage (MU)	11.0	0.0	1.2	0.0	0.4	12.6
Maximum Demand Met during the day (MW) (from NLDC SCADA)	45779	51325	42304	18740	2486	154125

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	0.043	0.00	0.03	11.48	11.52	81.34	7.14
						-	

C. Power Supply Position in States

RegionRegion	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	5329	0	100.4	19.4	-0.5	211	0.0
	Haryana	6678	0	111.8	60.7	1.3	265	0.1
	Rajasthan	10016	746	209.5	68.9	2.0	468	0.4
	Delhi	3736	0	65.3	47.7	-0.6	211	0.0
NR	UP	14375	430	277.6	99.2	0.3	921	0.2
	Uttarakhand	2095	0	35.8	28.1	-0.9	161	0.0
	HP	1559	5	28.2	22.8	1.3	276	0.0
	J&K	2074	519	43.5	41.1	-1.4	85	10.3
	Chandigarh	222	0	3.8	3.7	0.1	43	0.0
	Chhattisgarh	3253	0	72.5	5.3	-0.8	108	0.0
	Gujarat	14229	0	303.2	113.5	1.5	471	0.0
	MP	9851	0	218.2	117.0	-1.8	565	0.0
VA/D	Maharashtra	20975	0	425.7	136.2	2,2	556	0.0
WR	Goa	460	0	9.3	8.6	0.0	30	0.0
	DD	333	0	7.4	6.8	0.6	76	0.0
	DNH	757	0	18.5	16.8	1.7	83	0.0
	Essar steel	493	0	10.4	9.4	0.9	177	0.0
	Andhra Pradesh	8439	0	165.4	45.3	0.3	433	0.2
	Telangana	9078	0	179.7	85.1	-0.7	379	0.2
SR	Karnataka	9916	0	210.3	93.5	0.8	569	0.3
3N	Kerala	3514	0	67.0	54.1	0.9	160	0.1
	Tamil Nadu	13958	0	291.3	152.4	2.3	640	0.4
	Pondy	330	0	6.5	6.9	-0.4	27	0.0
	Bihar	4287	0	74.5	70.7	-2.7	350	0.0
	DVC	3195	0	70.1	-38.3	-2.1	150	0.0
ER	Jharkhand	1202	0	24.9	14.6	0.2	50	0.0
LIX	Odisha	4164	0	75.0	19.3	2.4	370	0.0
	West Bengal	6353	0	110.1	18.2	3.8	400	0.0
	Sikkim	83	0	1.1	1.7	-0.6	0	0.0
	Arunachal Pradesh	111	2	2.0	1.9	0.1	56	0.0
	Assam	1432	18	23.1	19.0	1.2	122	0.2
	Manipur	188	2	2.7	2.8	-0.1	14	0.0
NER	Meghalaya	329	0	6.0	3.7	0.1	71	0.0
NEK	Mizoram	92	2	1.7	1.2	0.1	5	0.0
	Nagaland	112	4	2.0	1.8	0.1	63	0.1
	Tripura	226	0	3.7	3.3	0.9	35	0.0

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

Di Transmational Exemanges (WE) Impor	Bhutan	Nepal	Bangladesh
Actual(MU)	3.0	-10.2	-12.3
Day peak (MW)	168.4	-523.8	-637.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	171.4	-218.9	129.9	-85.8	3.8	0.4
Actual(MU)	165.8	-224.3	129.0	-83.1	5.3	-7.3
O/D/U/D(MU)	-5.6	-5.4	-0.9	2.8	1.5	-7.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4221	12685	6592	1420	417	25335
State Sector	10665	17380	6330	4695	47	39117
Total	14886	30065	12922	6115	463	64452

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	545	1166	534	434	10	2688
Hydro	98	26	84	26	8	243
Nuclear	29	24	62	0	0	115
Gas, Naptha & Diesel	26	47	19	0	22	113
RES (Wind, Solar, Biomass & Others)	41	54	105	2	0	201
Total	739	1317	803	462	39	3360

		INTE	K-KEGI	JINAL EX	<u>CHANGES</u>	Date of I	Reporting	: 24-Jan-
	_							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)
nport/I	Export of	ER (With NR)		` ,			, ,	, ,
1	7651-37	GAYA-VARANASI	D/C	0	317	0.0	8.8	-8.8
3	765kV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	180 310	0.0	5.2	-0.4 -5.2
4		ALIPURDUAR-AGRA	- -	0	0	0.0	$\frac{3.2}{0.0}$	0.0
5	HVDC	PUSAULI B/B	S/C	0	247	0.0	6.0	-6.0
6		PUSAULI-VARANASI	S/C	0	187	0.0	0.0	0.0
7		PUSAULI -ALLAHABAD	S/C	0	122	0.0	0.0	0.0
8		MUZAFFARPUR-GORAKHPUR	D/C	0	390	0.0	6.0	-6.0
9	400 kV	PATNA-BALIA	Q/C	0	902	0.0	16.5	-16.5
10		BIHARSHARIFF-BALIA	D/C	0	295	0.0	4.0	-4.0
11		MOTIHARI-GORAKHPUR	D/C	0	0	0.0	6.0	-6.0
12	220 1 37	BIHARSHARIFF-VARANASI	D/C	0	124	0.0	1.4	-1.4
13	220 kV	PUSAULI-SAHUPURI	S/C	0	176	0.0	0.7	-0.7
14	_	SONE NAGAR-RIHAND	S/C S/C	0	0	0.0	0.0	0.0
15 16	132 kV	GARWAH-RIHAND KARMANASA-SAHUPURI	S/C S/C	0	0	0.6	0.0	0.6
17	-	KARMANASA-CHANDAULI	S/C S/C	0	0	0.0	0.0	0.0
± /	I		J 5/C	<u> </u>	ER-NR	0.6	55.0	-54.4
nport/I	Export of	ER (With WR)			LIN-I (A	V• U		57.7
	Torvor		D/C	0	^	10.2	0.0	10.2
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	0	0	10.3	0.0	10.3
19		NEW RANCHI-DHARAMJAIGARH	D/C	0	529	0.0	3.2	-3.2
20	400 kV	JHARSUGUDA-RAIGARH RANCHI-SIPAT	Q/C D/C	0	182 93	2.2	0.0	2.2
22		BUDHIPADAR-RAIGARH	S/C	0	183	0.0	2.1	-2.1
23	220 kV	BUDHIPADAR-KORBA	D/C	0	0	1.6	0.0	1.6
		BODIM ADAK-KOKDA	D/C	U	ER-WR	16.1	5.3	10.8
nport/]	Export of	ER (With SR)				2002		2000
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	0.0	0.0	22.6	-22.6
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	373.0	0.0	15.7	-15.7
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	2272.2	0.0	47.2	-47.2
27	400 kV	TALCHER-I/C	D/C	0.0	142.1	2.3	1.3	1.0
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0	0.0	0.0	0.0
					ER-SR	0.0	85.5	-85.5
_	Export of	ER (With NER)			1 222	0.0	0.0	
29	400 kV	BINAGURI-BONGAIGAON	D/C	0	233	0.0	0.0	0
30	220 kV	ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C D/C	0	225	3.9 0.0	0.8	-1
31	220 K V	ALII URDUAK-SALAKATI	D/C	U	ER-NER	3.9	0.8	3.1
nport/]	Export of	NER (With NR)			ER IVER	0.0	0.0	3.1
32	 	BISWANATH CHARIALI-AGRA	-	494	289	11.5	0.0	11.5
	l				NER-NR	11.5	0.0	11.5
 iport/I	Export of	WR (With NR)						
port/I 33	Export of	WR (With NR) CHAMPA-KURUKSHETRA	D/C	0	1360	0.0	51.5	-51.5
	_	<u> </u>	D/C D/C	0 250	1360 250	0.0	51.5 2.8	-51.5 -0.3
33	_	CHAMPA-KURUKSHETRA						
33 34	HVDC	CHAMPA-KURUKSHETRA V'CHAL B/B	D/C	250	250	2.6	2.8	-0.3
33 34 35 36 37	_	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	250 0 0 477	250 1210 2758 1338	2.6 0.0 0.0 0.0	2.8 22.4 52.4 28.5	-0.3 -22.4 -52.4 -28.5
33 34 35 36 37 38	HVDC	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI	D/C D/C D/C D/C S/C	250 0 0 477 173	250 1210 2758 1338 0	2.6 0.0 0.0 0.0 2.9	2.8 22.4 52.4 28.5 0.0	-0.3 -22.4 -52.4 -28.5 2.9
33 34 35 36 37 38 39	HVDC	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C D/C D/C S/C S/C	250 0 0 477 173 152	250 1210 2758 1338 0 94	2.6 0.0 0.0 0.0 2.9 0.0	2.8 22.4 52.4 28.5 0.0 0.7	-0.3 -22.4 -52.4 -28.5 2.9 -0.7
33 34 35 36 37 38 39 40	HVDC - 765 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	D/C D/C D/C S/C S/C S/C	250 0 0 477 173 152 957	250 1210 2758 1338 0 94 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9	2.8 22.4 52.4 28.5 0.0 0.7 0.0	-0.3 -22.4 -52.4 -28.5 2.9 -0.7 21.9
33 34 35 36 37 38 39 40 41	HVDC - 765 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR	D/C D/C D/C S/C S/C S/C D/C	250 0 0 477 173 152 957 0	250 1210 2758 1338 0 94 0 1497	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2	-0.3 -22.4 -52.4 -28.5 2.9 -0.7 21.9 -2
33 34 35 36 37 38 39 40 41 42	HVDC - 765 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA	D/C D/C D/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91	250 1210 2758 1338 0 94 0 1497	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0	-0.3 -22.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9
33 34 35 36 37 38 39 40 41 42 43	HVDC - 765 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91 32	250 1210 2758 1338 0 94 0 1497 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5	-0.3 -22.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4
33 34 35 36 37 38 39 40 41 42 43 44	HVDC 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91 32 114	250 1210 2758 1338 0 94 0 1497 0 88 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0	-0.3 -22.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9
33 34 35 36 37 38 39 40 41 42 43 44 45	HVDC 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64	250 1210 2758 1338 0 94 0 1497 0 88 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9
33 34 35 36 37 38 39 40 41 42 43 44	HVDC 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91 32 114	250 1210 2758 1338 0 94 0 1497 0 88 0 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC 765 kV 400 kV 220 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64	250 1210 2758 1338 0 94 0 1497 0 88 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC 765 kV 400 kV 220 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64	250 1210 2758 1338 0 94 0 1497 0 88 0 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC 765 kV 400 kV 220 kV 132kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91 32 114 64 0	250 1210 2758 1338 0 94 0 1497 0 88 0 0 WR-NR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91 32 114 64 0	250 1210 2758 1338 0 94 0 1497 0 888 0 0 0 WR-NR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7
33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/I 47	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 477 173 152 957 0 91 32 114 64 0	250 1210 2758 1338 0 94 0 1497 0 888 0 0 WR-NR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7
33 34 35 36 37 38 39 40 41 42 43 44 45 46 nport/I 48 49	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0	250 1210 2758 1338 0 94 0 1497 0 88 0 0 WR-NR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7
33 34 35 36 37 38 39 40 41 42 43 44 45 46 nport/I 48 49 50	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0	250 1210 2758 1338 0 94 0 1497 0 888 0 0 0 WR-NR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8 23.6 0.0 22.8 43.8	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7 -23.6 0.0 -22.8 -43.8
33 34 35 36 37 38 39 40 41 42 43 44 45 46 apport/I 48 49 50 51	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0	250 1210 2758 1338 0 94 0 1497 0 888 0 0 0 WR-NR 1000 0 1514 2445 138	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8 23.6 0.0 22.8 43.8 0.4	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7 -23.6 0.0 -22.8 -43.8 1.8
33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/I 47 48 49 50 51 52	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0 0 0 0 0 402 0	250 1210 2758 1338 0 94 0 1497 0 88 0 0 0 WR-NR 1000 0 1514 2445 138 0	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8 23.6 0.0 22.8 43.8 0.4 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7 -23.6 0.0 -22.8 -43.8 1.8 0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/I 47 48 49 50 51 52 53	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0 0 0 0 0 402 0 0	250 1210 2758 1338 0 94 0 1497 0 888 0 0 0 WR-NR 1000 0 1514 2445 138 0 0 0	2.6 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8 23.6 0.0 22.8 43.8 0.4 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7 -23.6 0.0 -22.8 -43.8 1.8 0.0 0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46 port/I 47 48 49 50 51 52 53	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0 0 0 0 0 402 0 0	250 1210 2758 1338 0 94 0 1497 0 888 0 0 0 WR-NR 1000 0 1514 2445 138 0 0 0 WR-SR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1 0.0 0.0 0.0 0.0 0.0 1.5	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8 23.6 0.0 22.8 43.8 0.4 0.0 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7 -23.6 0.0 -22.8 -43.8 1.8 0.0 0.0 1.5
33 34 35 36 37 38 39 40 41 42 43 44 45 46 port/I 48 49 50 51 52 53	HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV 400 kV	CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 477 173 152 957 0 91 32 114 64 0 0 0 0 0 402 0 73	250 1210 2758 1338 0 94 0 1497 0 888 0 0 0 WR-NR 1000 0 1514 2445 138 0 0 0 WR-SR	2.6 0.0 0.0 0.0 2.9 0.0 21.9 0 0.9 0.1 1.9 0.9 0.0 31.1 0.0 0.0 0.0 0.0 0.0 1.5	2.8 22.4 52.4 28.5 0.0 0.7 0.0 2 0.0 0.5 0.0 0.0 160.8 23.6 0.0 22.8 43.8 0.4 0.0 0.0 0.0	-0.3 -22.4 -52.4 -52.4 -28.5 2.9 -0.7 21.9 -2 0.9 -0.4 1.9 0.9 0.0 -129.7 -23.6 0.0 -22.8 -43.8 1.8 0.0 0.0 1.5