

## 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, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 31<sup>st</sup> Mar 2018

To,

- 1. कार्यकारी निदेशक, पू .क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता 700033 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.,29 , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 General Manager, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 30.03.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 30-Mar-2018 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा०भा०प्रे०के० 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 30<sup>th</sup> Mar 2018, is available at the NLDC website.

धन्यवाद,

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

# Report for previous day 31-Mar-18

## A. Maximum Demand

7. Maximum Demand						
	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak	20021	46002	44122	10460	2002	1.40.400
hrs(MW) (at 1900 hrs; from RLDCs)	38831	46083	44122	18460	2003	149499
Peak Shortage (MW)	516	45	0	0	360	921
Energy Met (MU)	887	1132	1057	410	32	3517
Hydro Gen(MU)	94	15	66	33	8	217
Wind Gen(MU)	3	50	47			101
Solar Gen (MU)*	6.88	21.40	50.30	0.77	0.02	79
Energy Shortage (MU)	11.9	0.0	0.0	0.0	2.7	14.7
Maximum Demand Met during the day	A10EE	50162	47050	10590	1050	152207
(MW) (from NLDC SCADA)	41855	50163	47059	19589	1859	153307

## 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	0.032	0.00	0.01	4.86	4.87	80.27	14.86

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	5898	0	127.9	31.4	0.4	118	0.0
	Haryana	6471	0	119.2	43.7	1.0	193	0.0
	Rajasthan	8797	0	173.8	49.3	6.3	655	1.9
	Delhi	3675	0	75.5	61.4	-0.6	145	0.1
NR	UP	13671	90	285.1	98.3	-0.2	454	0.0
	Uttarakhand	1822	0	35.4	27.6	0.7	145	0.3
	HP	1386	25	26.7	20.0	0.9	136	0.3
	J&K	2125	531	39.5	37.1	-3.0	185	9.3
	Chandigarh	177	0	3.4	3.1	0.3	40	0.0
	Chhattisgarh	3913	0	88.0	17.7	-2.4	132	0.0
	Gujarat	15459	0	345.0	178.5	4.0	410	0.0
	MP	8571	0	175.2	69.7	-2.6	292	0.0
1445	Maharashtra	22133	0	477.5	151.7	1.5	509	0.0
WR	Goa	519	0	10.5	9.8	0.0	42	0.0
	DD	326	0	7.3	6.7	0.7	54	0.0
	DNH	748	0	17.3	16.8	0.5	58	0.0
	Essar steel	533	0	11.1	10.9	0.1	244	0.0
	Andhra Pradesh	8852	0	181.7	55.8	0.9	785	0.0
	Telangana	9835	0	224.0	108.2	0.8	406	0.0
CD	Karnataka	10652	0	228.9	79.6	-0.2	477	0.0
SR	Kerala	3639	0	73.2	48.7	1.6	194	0.0
	Tamil Nadu	15017	0	341.1	167.4	1.1	581	0.0
	Pondy	368	0	7.8	8.2	-0.3	36	0.0
	Bihar	4168	0	70.5	64.4	-2.8	200	0.0
	DVC	3059	0	69.5	-57.8	-0.7	220	0.0
ER	Jharkhand	1163	0	23.2	13.0	2.0	80	0.0
EN	Odisha	4260	0	87.7	39.8	0.8	220	0.0
	West Bengal	7892	0	157.6	45.3	1.6	220	0.0
	Sikkim	97	0	1.6	1.2	0.4	12	0.0
	<b>Arunachal Pradesh</b>	110	3	1.8	1.7	0.1	65	0.0
	Assam	1250	210	18.4	16.6	0.2	95	2.0
	Manipur	130	15	1.5	2.3	-0.7	24	0.1
NER	Meghalaya	250	2	4.5	3.7	-0.5	45	0.0
	Mizoram	75	3	1.2	1.1	0.0	10	0.0
	Nagaland	123	2	2.0	1.9	0.0	30	0.0
	Tripura	135	70	2.3	2.8	-1.2	50	0.4

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

D. Transmational Exemanges (We)	) Import(   ve)/Export( ve)		
	Bhutan	Nepal	Bangladesh
Actual(MU)	2.8	-8.2	-12.9
Day peak (MW)	126.5	-275.3	-628.2

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	146.3	-197.8	104.6	-57.7	4.7	0.2
Actual(MU)	153.9	-217.0	104.7	-45.5	0.7	-3.0
O/D/U/D(MU)	7.6	-19.2	0.1	12.2	-4.0	-3.2

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5770	12926	5552	2680	270	27198
State Sector	8020	15743	3590	3505	50	30908
Total	13790	28669	9142	6185	319	58106

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	568	1178	690	453	6	2895
Hydro	94	15	68	33	8	218
Nuclear	28	26	47	0	0	100
Gas, Naptha & Diesel	26	49	23	0	21	118
RES (Wind, Solar, Biomass & Others)	39	72	140	1	0	253
Total	755	1340	968	488	34	3584

		INTE	CR-REGIO	ONAL EX	CHANGES			Import=(+ve		
Sl No	Voltage	Line Details	Circuit	Max Import	Max Export (MW)	Import (MU)	Export	/Export =(-ve) for NET (MU) NET		
mport/H	Level Export of	ER (With NR)		(MW)	ı		(MU)	(MU)		
1		GAYA-VARANASI	D/C	0	491	0.0	5.9	-5.9		
2	765kV	SASARAM-FATEHPUR	S/C	0	223	0.0	1.3	-1.3		
3 4		GAYA-BALIA ALIPURDUAR-AGRA	S/C	0	476	0.0	7.6	-7.6 -8.3		
5	HVDC	PUSAULI B/B	S/C	0	0	0.0	0.0	0.0		
6	-	PUSAULI-VARANASI	S/C	0	55	0.0	0.1	-0.1		
7 8	-	PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	S/C D/C	0	63 424	0.8	0.0 4.9	0.8 -4.9		
9	400 kV	PATNA-BALIA	Q/C	0	750	0.0	11.8	-11.8		
10	1	BIHARSHARIFF-BALIA	D/C	0	248	0.0	4.8	-4.8		
11	]	MOTIHARI-GORAKHPUR	D/C	0	381	0.0	5.3	-5.3		
12		BIHARSHARIFF-VARANASI	D/C	0	364	0.0	2.5	-2.5		
13	220 kV	PUSAULI-SAHUPURI SONE NAGAR-RIHAND	S/C S/C	0	178	0.0	0.0	-3.0		
15	-	GARWAH-RIHAND	S/C	0	0	0.6	0.0	0.6		
16	132 kV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0		
17	1	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0		
					ER-NR	1.4	55.5	-54.0		
	Export of	ER (With WR)				1				
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	0	0	23.1	0.0	23.1		
19	<u> </u>	NEW RANCHI-DHARAMJAIGARH	D/C	0	119	7.3	0.0	7.3		
20	400 kV	JHARSUGUDA-RAIGARH RANCHI-SIPAT	Q/C D/C	0	0	14.0 4.2	0.0	14.0 4.2		
22		BUDHIPADAR-RAIGARH	S/C	0	85	0.0	0.4	-0.4		
23	220 kV	BUDHIPADAR-KORBA	D/C	0	0	4.1	0.0	4.1		
mport/F	Export of	ER (With SR)			ER-WR	52.6	0.4	52.2		
24	<del>,</del>	ANGUL-SRIKAKULAM	D/C	0.0	0.0	0.0	26.6	-26.6		
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	325.2	0.0	14.1	-14.1		
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	2103.7	0.0	46.6	-46.6		
27	400 kV	TALCHER-I/C	D/C	0.0	246.9	2.3	3.9	-1.5		
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0 <b>ER-SR</b>	0.0 <b>0.0</b>	0.0 <b>87.3</b>	0.0 -87.3		
mport/H	Export of	ER (With NER)			ZI SI	0.0	07.0	07.5		
29	400 kV	BINAGURI-BONGAIGAON	D/C	0	735	0.0	2.5	-3		
30		ALIPURDUAR-BONGAIGAON	D/C	0	649	3.9		4		
31	220 kV	ALIPURDUAR-SALAKATI	D/C	0	0 <b>ER-NER</b>	0.0 <b>3.9</b>	0.9 <b>3.4</b>	-1 <b>0.5</b>		
	<del>, -</del>	NER (With NR)								
32	HVDC	BISWANATH CHARIALI-AGRA	-	0	0 <b>NER-NR</b>	0.0	0.0	0.0		
mport/F	Export of	WR (With NR)			NEK-NK	0.0	0.0	0.0		
33		CHAMPA-KURUKSHETRA	D/C	0	_	0.0	14.7	-14.7		
34	HVDC				1236	0.0	17./			
35	ΙΝΝΟ	V'CHAL B/B	D/C	0	1236 250	0.0	4.5	-4.5		
	HVDC	V'CHAL B/B APL -MHG	D/C D/C	0	250 307	0.0	4.5 7.4	-7.4		
36	HVDC	V'CHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C	0	250 307 2488	0.0 0.0 0.0	4.5 7.4 46.8	-7.4 -46.8		
36 37		V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	0 0	250 307 2488 1372	0.0 0.0 0.0 0.0	4.5 7.4 46.8 26.2	-7.4 -46.8 -26.2		
36 37 38	765 kV	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C D/C D/C D/C	0 0 0 0	250 307 2488 1372 889	0.0 0.0 0.0 0.0 0.0	4.5 7.4 46.8 26.2 11.8	-7.4 -46.8 -26.2 -11.8		
36 37		V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	0 0	250 307 2488 1372	0.0 0.0 0.0 0.0	4.5 7.4 46.8 26.2	-7.4 -46.8 -26.2		
36 37 38 39		V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI	D/C D/C D/C D/C D/C S/C	0 0 0 0 0 755	250 307 2488 1372 889 0	0.0 0.0 0.0 0.0 0.0 15.5	4.5 7.4 46.8 26.2 11.8 0.0	-7.4 -46.8 -26.2 -11.8 15.5		
36 37 38 39 40	765 kV	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C D/C D/C D/C S/C S/C	0 0 0 0 755 0	250 307 2488 1372 889 0 1551	0.0 0.0 0.0 0.0 0.0 15.5 0.0	4.5 7.4 46.8 26.2 11.8 0.0 36.4	-7.4 -46.8 -26.2 -11.8 15.5 -36.4		
36 37 38 39 40 41 42 43		V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C	0 0 0 0 755 0 409 350	250 307 2488 1372 889 0 1551 0 0 483	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1		
36 37 38 39 40 41 42 43 44	765 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C D/C	0 0 0 0 755 0 409 350 0	250 307 2488 1372 889 0 1551 0 0 483 474	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3		
36 37 38 39 40 41 42 43 44 45	765 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-KOTA	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	0 0 0 0 755 0 409 350 0 0	250 307 2488 1372 889 0 1551 0 0 483 474 32	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3.0 0.1	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4		
36 37 38 39 40 41 42 43 44	765 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C D/C	0 0 0 0 755 0 409 350 0	250 307 2488 1372 889 0 1551 0 0 483 474	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3		
36 37 38 39 40 41 42 43 44 45 46	765 kV - 400 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-KOTA  BADOD-MORAK	D/C 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	0 0 0 0 755 0 409 350 0 0 70 30	250 307 2488 1372 889 0 1551 0 0 483 474 32 43	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 0.0 0.0 0.1 0.4	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3		
36 37 38 39 40 41 42 43 44 45 46 47	765 kV - 400 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA	D/C 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	0 0 0 0 755 0 409 350 0 0 70 30 78	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 3 0.1 0.4 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0		
36 37 38 39 40 41 42 43 44 45 46 47 48 49	765 kV - 400 kV - 220 kV	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C 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	0 0 0 0 755 0 409 350 0 0 70 30 78	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3 0.1 0.4 0.0 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3		
36 37 38 39 40 41 42 43 44 45 46 47 48 49	765 kV  400 kV  220 kV  132kV  Export of HVDC	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C -	0 0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51	765 kV  400 kV  220 kV  132kV  Export of HVDC	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C	0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52	765 kV  400 kV  220 kV  132kV  Export of HVDC	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  WR (With SR)  BARSUR-L.SILERU  SOLAPUR-RAICHUR	D/C 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 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	0 0 0 755 0 409 350 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 0.0 0.0 151.3	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52 53	765 kV  - 400 kV  - 220 kV  - 132kV  - Export of  HVDC LINK  - 765 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  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 D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C S/C D/C S/C S/C D/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	0 0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3 23.9 0.0 6.8 36.9	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3  -23.9 0.0 -6.8 -36.9		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52	765 kV  400 kV  220 kV  132kV  Export of HVDC LINK  765 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  WR (With SR)  BARSUR-L.SILERU  SOLAPUR-RAICHUR	D/C 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 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	0 0 0 755 0 409 350 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 0.0 0.0 151.3	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52 53 54	765 kV  - 400 kV  - 220 kV  - 132kV  - Export of  HVDC LINK  - 765 kV	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 D/C D/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C S/C D/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	0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3  23.9 0.0 6.8 36.9 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3  -23.9 0.0 -6.8 -36.9 8.0		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52 53 54 55	765 kV  400 kV  220 kV  132kV  Export of HVDC LINK  765 kV  400 kV	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 D/C S/C S/C S/C S/C S/C S/C S/C D/C S/C S/C D/C S/C D/C D/C D/C D/C D/C D/C D/C D/C D/C D	0 0 0 755 0 409 350 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR  1000 0 841 2091 0 0	0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 0.0 0.0 151.3 23.9 0.0 6.8 36.9 0.0 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3  -23.9 0.0 -6.8 -36.9 8.0 0.0		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52 53 54 55 56	765 kV  400 kV  220 kV  132kV  Export of HVDC LINK  765 kV  400 kV	V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 D/C S/C S/C S/C S/C S/C S/C S/C D/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	0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR  1000 0 841 2091 0 0	0.0 0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3 23.9 0.0 6.8 36.9 0.0 0.0 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3  -23.9 0.0 -6.8 -36.9 8.0 0.0 0.0		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52 53 54 55 56	765 kV  400 kV  220 kV  132kV  Export of HVDC LINK  765 kV  400 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  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 D/C S/C S/C S/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	0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR  1000 0 841 2091 0 0 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3  23.9 0.0 6.8 36.9 0.0 0.0 0.0 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3  -23.9 0.0 -6.8 -36.9 8.0 0.0 0.0 2.2		
36 37 38 39 40 41 42 43 44 45 46 47 48 49 <b>mport/F</b> 50 51 52 53 54 55 56	765 kV  400 kV  220 kV  132kV  Export of HVDC LINK  765 kV  400 kV	V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  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 D/C S/C S/C S/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	0 0 0 755 0 409 350 0 0 70 30 78 48 0	250 307 2488 1372 889 0 1551 0 0 483 474 32 43 0 9 0 WR-NR  1000 0 841 2091 0 0 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 15.5 0.0 7.9 5.7 22.1 0 0.5 0.1 1.0 0.4 0.0 53.1  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	4.5 7.4 46.8 26.2 11.8 0.0 36.4 0.0 0.0 0.0 3 0.1 0.4 0.0 0.0 151.3  23.9 0.0 6.8 36.9 0.0 0.0 0.0 0.0	-7.4 -46.8 -26.2 -11.8 15.5 -36.4 7.9 5.7 22.1 -3 0.4 -0.3 1.0 0.3 0.0 -98.3  -23.9 0.0 -6.8 -36.9 8.0 0.0 0.0 2.2		