

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: 16th 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 15.03.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 15-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 15th Mar 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day Date of Reporting 16-Mar-18

A. Maximum Demand

	ND	WD	CD	ED	MED	T-4-1
	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak	41205	45.00	42015	20504	2204	152040
hrs(MW) (at 1900 hrs; from RLDCs)	41385	45669	42817	20784	2394	153049
Peak Shortage (MW)	1447	45	0	135	54	1681
Energy Met (MU)	927	1095	1019	408	40	3489
Hydro Gen(MU)	109	21	82	30	7	250
Wind Gen(MU)	6	44	22			72
Solar Gen (MU)*	7.96	16.41	38.32	0.49	0.02	63
Energy Shortage (MU)	19.8	0.0	0.0	0.4	0.5	20.7
Maximum Demand Met during the day	43653	49117	45867	21304	2320	156809
(MW) (from NLDC SCADA)	45055	4711/	43007	21304	2320	130009

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	0.056	0.00	0.71	16.42	17.13	78.46	4.41

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	6304	0	132.4	29.7	-0.9	79	0.0
	Harvana	6294	0	131.2	51.8	2.6	230	3.1
NR	Rajasthan	9457	264	195.1	46.6	3.1	407	1.3
	Delhi	3539	0	69.7	53.7	-0.6	144	0.0
	UP	13358	950	293.9	94.8	0.1	540	5.7
	Uttarakhand	1811	0	34.5	26.4	-0.1	93	0.0
	HP	1436	0	26.3	20.4	1.5	137	0.0
	J&K	2067	517	40.9	38.5	-2.1	318	9.7
	Chandigarh	170	0	3.2	3.0	0.3	35	0.0
	Chhattisgarh	3747	0	86.3	21.6	-2.5	49	0.0
	Gujarat	14520	0	322.4	158.1	2.5	417	0.0
	MP	8717	0	180.5	82.2	-4.6	169	0.0
MD	Maharashtra	21678	0	459.9	144.2	-3.6	301	0.0
WR	Goa	485	0	10.9	9.9	0.8	20	0.0
	DD	332	0	7.5	7.0	0.5	81	0.0
	DNH	768	0	17.8	17.0	0.7	59	0.0
	Essar steel	527	0	10.1	9.2	0.9	183	0.0
	Andhra Pradesh	8960	0	184.6	54.4	-0.3	883	0.0
	Telangana	10050	0	220.6	102.0	0.5	466	0.0
SR	Karnataka	10153	0	214.1	81.5	-1.4	500	0.0
3K	Kerala	3499	0	72.5	48.5	1.4	239	0.0
	Tamil Nadu	14741	0	320.0	155.7	1.6	587	0.0
	Pondy	361	0	7.7	8.0	-0.3	39	0.0
	Bihar	4462	0	76.2	68.5	1.4	412	0.0
	DVC	2954	0	64.7	-50.3	0.9	305	0.4
ER	Jharkhand	1202	0	24.5	13.8	0.8	145	0.0
EN	Odisha	4631	0	89.0	35.5	1.7	356	0.0
	West Bengal	8085	0	151.9	28.8	1.8	425	0.0
	Sikkim	102	0	1.5	1.2	0.3	20	0.0
	Arunachal Pradesh	115	2	2.0	1.7	0.3	59	0.0
	Assam	1415	35	22.6	18.1	1.1	146	0.3
	Manipur	175	3	2.2	1.9	0.3	22	0.0
NER	Meghalaya	314	1	5.1	3.3	-0.2	57	0.0
	Mizoram	85	2	1.6	0.9	0.1	34	0.0
	Nagaland	127	3	2.0	1.7	0.1	40	0.0
	Tripura	251	1	4.1	3.1	0.5	26	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	1.6	-9.7	-14.4
Day neak (MW)	94.4	-445.5	-633.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	125.8	-133.2	98.9	-94.0	2.1	-0.4
Actual(MU)	122.1	-149.7	97.6	-77.8	3.0	-4.7
O/D/U/D(MU)	-3.7	-16.4	-1.3	16.2	0.9	-4.4

F. Generation Outage(MW)

r. Generation Outage(WW)						
	NR	WR	SR	ER	NER	Total
Central Sector	5611	15741	6352	980	245	28929
State Sector	9575	17601	3920	4535	50	35681
Total	15186	33342	10272	5515	295	64609

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	612	1091	679	484	10	2877
Hydro	109	21	82	30	7	250
Nuclear	28	24	46	0	0	98
Gas, Naptha & Diesel	31	56	21	0	23	131
RES (Wind, Solar, Biomass & Others)	42	60	108	2	0	213
Total	822	1253	937	515	41	3568

^{*}Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data. सचिव(कर्जा)/संयुक्त सचिव(पारेपण)/(ओ एम)/निदेशक(ओ एम)/मुख्य अभियंता-के०वि०प्रा०(गि०प्र०)/ मुख्य कार्यपालक अधिकारी(पोसोको)/सभी राज्यो के मुख्य सचिव(कर्जा सचिव

						Date of I	Reporting :	16-Mar-
					_			Import=(+ve) /Export =(-ve) for NET (MU)
SI No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
	Export of	ER (With NR)	D/C		240	0.0	4.4	1 44
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	0	349 57	0.0 2.3	0.0	-4.4 2.3
3	/03KV	GAYA-BALIA	S/C	0	465	0.0	7.0	-7.0
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5	HVDC	PUSAULI B/B	S/C	0	198	0.0	4.6	-4.6
6	_	PUSAULI-VARANASI	S/C	0	170	0.0	0.0	0.0
7	1	PUSAULI -ALLAHABAD	S/C	0	101	0.0	0.0	0.0
8		MUZAFFARPUR-GORAKHPUR	D/C	0	289	0.0	2.1	-2.1
9	400 kV	PATNA-BALIA	Q/C	0	866	0.0	17.4	-17.4
10	4	BIHARSHARIFF-BALIA	D/C	0	305	0.0	4.6	-4.6
11	-	MOTIHARI-GORAKHPUR	D/C	0	277	0.0	4.6	-4.6
12	220 1 17	BIHARSHARIFF-VARANASI	D/C	0	307	0.0	0.3	-0.3
13	220 kV	PUSAULI-SAHUPURI	S/C	0	168	0.0	3.2	-3.2
15	-	SONE NAGAR-RIHAND	S/C S/C	0	0	0.0	0.0	0.0
16	132 kV	GARWAH-RIHAND KARMANASA-SAHUPURI	S/C	0	0	0.7	0.0	0.7
17	1	KARMANASA-SAHUPURI KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
1/	1	PARTICIANDAULI	3/0	U	ER-NR	3.0	48.1	-45.1
_	Export of	ER (With WR)						
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	0	0	8.1	0.0	8.1
19		NEW RANCHI-DHARAMJAIGARH	D/C	0	403	0.0	1.9	-1.9
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	0	159	2.2	0.0	2.2
21		RANCHI-SIPAT	D/C	0	81	1.4	0.0	1.4
22	220 kV	BUDHIPADAR-RAIGARH	S/C	0	141	0.0 3.1	0.0	-2.1 3.1
23		BUDHIPADAR-KORBA	D/C	0	ER-WR	14.7	4.0	10.8
nport/I	Export of	ER (With SR)						
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	0.0	0.0	25.9	-25.9
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	344.3	0.0	15.2	-15.2
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	2039.3	0.0	42.9	-42.9
27	400 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	0.0	896.3 0.0	0.0	5.3	-5.3 0.0
29 30	Export of 400 kV	ER (With NER) BINAGURI-BONGAIGAON ALIPURDUAR-BONGAIGAON	D/C D/C	0	988 811	0.0	3.1	-3 4
31	220 kV	ALIPURDUAR-SALAKATI	D/C	0	0	0.0	0.9	-1
nnort/L						2.0		0.1
32		NER (With NR) BISWANATH CHARIALI-AGRA	-	491	ER-NER	0.0	2.5	-0.1
			-	491				
32 nport/I	HVDC	BISWANATH CHARIALI-AGRA WR (With NR)			500 NER-NR	0.0	2.5 2.5	-2.5 -2.5
32 nport/I 33	HVDC Export of	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA	D/C	0	500 NER-NR	0.0 0.0	2.5 2.5 48.9	-2.5 -2.5
32 nport/I 33 34	HVDC	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	0 150	500 NER-NR 1120 0	0.0 0.0 0.0 3.5	2.5 2.5 48.9 0.0	-2.5 -2.5 -48.9 3.5
32 nport/I 33 34 35	HVDC Export of	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG	D/C D/C D/C	0 150 0	500 NER-NR 1120 0 307	0.0 0.0 0.0 3.5 0.0	2.5 2.5 48.9 0.0 7.4	-2.5 -2.5 -48.9 3.5 -7.4
32 nport/I 33 34 35 36	HVDC Export of	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V°CHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C D/C	0 150 0	500 NER-NR 1120 0 307 2314	0.0 0.0 0.0 3.5 0.0 0.0	2.5 2.5 48.9 0.0 7.4 45.6	-2.5 -2.5 -48.9 3.5 -7.4 -45.6
32 aport/I 33 34 35 36 37	Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C D/C	0 150 0 0 484	500 NER-NR 1120 0 307 2314 1156	0.0 0.0 0.0 3.5 0.0 0.0 0.0	2.5 2.5 48.9 0.0 7.4 45.6 17.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0
32 nport/I 33 34 35 36 37 38	Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI	D/C D/C D/C D/C D/C D/C S/C	0 150 0 0 484 385	500 NER-NR 1120 0 307 2314 1156 0	0.0 0.0 3.5 0.0 0.0 0.0 7.5	2.5 2.5 48.9 0.0 7.4 45.6 17.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5
32 mport/F 33 34 35 36 37 38 39	Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-BHINMAL	D/C D/C D/C D/C D/C S/C S/C	0 150 0 0 484 385 377	500 NER-NR 1120 0 307 2314 1156 0 0	0.0 0.0 0.0 3.5 0.0 0.0 0.0 0.0 7.5 6.0	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0
32 mport/F 33 34 35 36 37 38 39 40	HVDC Export of HVDC - 765 kV	BISWANATH CHARIALI-AGRA WR (With NR) 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 D/C D/C S/C S/C S/C	0 150 0 0 484 385 377 971	1120 0 307 2314 1156 0 0	0.0 0.0 3.5 0.0 0.0 0.0 0.0 7.5 6.0 22.7	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 -17.5 -6.0 22.7
32 nport/F 33 34 35 36 37 38 39 40 41	HVDC Export of HVDC - 765 kV	BISWANATH CHARIALI-AGRA WR (With NR) 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 D/C D/C S/C S/C S/C D/C	0 150 0 0 484 385 377 971	1120 0 307 2314 1156 0 0 0 246	0.0 0.0 3.5 0.0 0.0 0.0 0.0 7.5 6.0 22.7	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7
32 nport/I 33 34 35 36 37 38 39 40 41 42	HVDC Export of HVDC - 765 kV - 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RHAND RAPP-SHUJALPUR BADOD-KOTA	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	0 150 0 0 484 385 377 971 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 22.7 0	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 2 0.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2
32 mport/F 33 34 35 36 37 38 39 40 41 42 43	HVDC Export of HVDC - 765 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK	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	0 150 0 0 484 385 377 971 0 65 42	500 NER-NR 1120 0 307 2314 1156 0 0 246 0 25	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 2 0.0	-2.5 -2.5 -48.9 -3.5 -7.4 -45.6 -17.0 -7.5 -6.0 -22.7 -2 0.5 -0.5
32 mport/I 33 34 35 36 37 38 39 40 41 42	HVDC Export of HVDC - 765 kV - 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RHAND RAPP-SHUJALPUR BADOD-KOTA	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	0 150 0 0 484 385 377 971 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 22.7 0	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 2 0.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2
32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44	HVDC Export of HVDC - 765 kV - 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 150 0 0 484 385 377 971 0 65 42	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 225 0	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3	2.5 2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 2 0.0 0.2	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.2 1.5
32 aport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC Export of HVDC 765 kV 400 kV 220 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C 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 S/C S	0 150 0 484 385 377 971 0 65 42 101	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 25 0 0	0.0 0.0 3.5 0.0 0.0 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-2.5 -2.5 -48.9 3.5 -7.4 -45.6 -17.0 -17.5 -6.0 22.7 -2 0.5 0.2 1.5 0.6
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC Export of HVDC - 765 kV - 400 kV - 220 kV - 132kV Export of	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	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 S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 225 0 0 0 WR-NR	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.2 0.0 0.0 0.2	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8
32 mport/I 33 34 35 36 37 38 39 40 41 42 44 45 46 mport/I 47	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 25 0 0 WR-NR	0.0 0.0 3.5 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.0 0.2 0.0 0.0 0.0 120.6	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8
32 mport/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 mport/I 47	HVDC Export of HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK	BISWANATH CHARIALI-AGRA WR (With NR) 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 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	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 25 0 0 WR-NR	0.0 0.0 3.5 0.0 0.0 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 -17.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR) 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 D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 0 25 0 WR-NR	0.0 0.0 3.5 0.0 0.0 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 2 0.0 0.0 0.0 0.0 120.6	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8
32 nport/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 48 49 50	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -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 S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 225 0 0 WR-NR 1000 0 980	0.0 0.0 3.5 0.0 0.0 7.5 6.0 22.7 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.2 0.0 0.0 0.0 120.6 23.9 0.0 13.2 32.9	-2.5 -48.9 -3.5 -7.4 -45.6 -17.0 -7.5 -6.0 -22.7 -2 -0.5 -0.2 -1.5 -0.6 -0.0 -77.8
32 sport/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 sport/I 47 47 48 49 50 51	HVDC Export of HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK	BISWANATH CHARIALI-AGRA WR (With NR) 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) BHARDRAWATI B/B BARSUR-L.SILERU SOLAPUR-RICHMER WARDIHA-NIZAMABAD KOLHAPUR-KUDGI	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	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 225 0 0 WR-NR 1000 0 980 1944 0	0.0 0.0 3.5 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.2 0.0 0.0 0.2 0.0 120.6 23.9 0.0 13.2 32.9 0.0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 -7.5 -6.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8
32 mport/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-SHINMAL 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 KOLHAPUR-CHIKODI	D/C 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 S/C S/C S/C S/C S/C S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 225 0 0 0 WR-NR 1000 0 980 1944 0 0 0	0.0 0.0 0.0 3.5 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.0 0.0 0.0 0.0 120.6 23.9 0.0 13.2 32.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 -6.0 22.7 -2 0.5 0.6 0.0 -77.8
32 nport/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 nport/I 47 48 49 50 51 52 53	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -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 KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	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 S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 246 0 0 25 0 0 WR-NR 1000 0 980 1944 0 0 0 0	0.0 0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.2 0.0 0.2 0.0 0.0 120.6 23.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.6 0.0 -77.8 -23.9 0.0 0.0 0.0
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-SHINMAL 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 KOLHAPUR-CHIKODI	D/C 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 S/C S/C S/C S/C S/C S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 2446 0 0 25 0 0 WR-NR 1000 0 980 1944 0 0 0 0 0	0.0 0.0 0.0 3.5 0.0 0.0 7.5 6.0 22.7 0 0.5 0.3 1.5 0.6 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.2 0.0 0.0 0.0 120.6 23.9 0.0 13.2 32.9 0.0 0.0 0.0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8 -23.9 0.0 0.0 0.0 0.0 2.2
32 pport/II 33 34 35 36 37 38 39 40 41 42 43 44 44 45 46 47 48 49 50 51 52 53 54	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-KANKROLI ZERDA-SHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-MOTAL BADOD-MOTAL BADOD-MOTAL 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 TR.	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	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 2446 0 0 255 0 0 WR-NR 1000 0 980 1944 0 0 0 0 WR-SR	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 0.5 0.3 1.5 0.0 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.2 0.0 0.2 0.0 0.0 120.6 23.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.6 0.0 -77.8 -23.9 0.0 0.0 0.0
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -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 KOLHAPUR-KUDGI 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 S/C S/C S	0 150 0 0 484 385 377 971 0 65 42 101 55 0	500 NER-NR 1120 0 307 2314 1156 0 0 0 2446 0 0 255 0 0 WR-NR 1000 0 980 1944 0 0 0 0 WR-SR	0.0 0.0 3.5 0.0 0.0 0.0 7.5 6.0 0.5 0.3 1.5 0.0 0.0 42.8	2.5 2.5 48.9 0.0 7.4 45.6 17.0 0.0 0.0 0.2 0.0 0.0 0.0 120.6 23.9 0.0 13.2 32.9 0.0 0.0 0.0	-2.5 -48.9 3.5 -7.4 -45.6 -17.0 7.5 6.0 22.7 -2 0.5 0.2 1.5 0.6 0.0 -77.8 -23.9 0.0 0.0 0.0 0.0 2.2