

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: 11th Jan 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 10.01.2018.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-२०१० की धारा स.-5.5.१ के प्रावधान के अनुसार, दिनांक १०-जनवरी - २०१८ 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 10th January 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day 11-Jan-18

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	44562	45248	39799	18282	2411	150302
Peak Shortage (MW)	560	45	0	150	17	772
Energy Met (MU)	952	1059	906	353	43	3312
Hydro Gen(MU)	106	27	48	23	9	214
Wind Gen(MU)	7	46	40			94
Solar Gen (MU)*	2.61	14.86	36.60	0.68	0.02	55
Energy Shortage (MU)	12.5	0.0	0.4	0.5	0.2	13.5
Maximum Demand Met during the day (MW) (from NLDC SCADA)	47460	49943	42317	18493	2396	154860

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	0.034	0.00	0.24	5.81	6.05	80.53	13.41

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	5720	0	108.7	24.3	0.3	179	0.0
NR	Haryana	6433	0	129.9	64.0	1.2	209	0.0
	Rajasthan	11025	0	216.9	72.2	4.7	501	0.3
	Delhi	4214	0	69.3	51.9	-0.7	206	0.0
	UP	14483	0	309.9	108.9	1.4	676	1.3
	Uttarakhand	2149	0	39.9	29.3	0.8	215	0.0
	HP	1376	0	27.9	22.6	1.0	196	0.1
	J&K	2240	560	45.5	43.0	-1.7	64	10.7
	Chandigarh	239	0	3.8	3.9	-0.1	21	0.0
	Chhattisgarh	3366	0	73.6	5.5	-1.7	49	0.0
	Gujarat	14189	0	302.2	92.0	3.0	353	0.0
	MP	9878	0	227.0	136.6	-1.4	383	0.0
WD	Maharashtra	20035	0	413.4	130.0	-0.2	345	0.0
WR	Goa	436	0	9.2	8.4	0.4	57	0.0
	DD	331	0	7.3	6.7	0.6	75	0.0
	DNH	748	0	17.4	16.2	1.3	109	0.0
	Essar steel	451	0	8.8	8.8	0.0	488	0.0
	Andhra Pradesh	8267	0	165.6	47.8	2.9	488	0.1
	Telangana	9291	0	180.7	76.5	-1.3	348	0.1
SR	Karnataka	9831	0	206.6	89.9	0.1	426	0.1
3N	Kerala	3448	0	66.2	53.0	0.7	196	0.0
	Tamil Nadu	13347	0	279.8	146.8	1.2	596	0.1
	Pondy	330	0	6.5	7.2	-0.7	24	0.0
	Bihar	4221	0	74.7	67.7	1.4	395	0.0
	DVC	2983	0	69.0	-28.0	-0.3	345	0.0
ER	Jharkhand	1035	150	24.6	16.0	1.0	185	0.5
LIV	Odisha	3984	0	70.2	23.1	2.8	435	0.0
	West Bengal	6465	0	113.2	18.2	1.7	456	0.0
	Sikkim	113	0	1.8	1.7	0.1	20	0.0
	Arunachal Pradesh	128	1	2.2	2.0	0.2	56	0.0
	Assam	1421	14	23.8	19.5	1.8	172	0.1
	Manipur	190	1	2.7	2.9	-0.2	23	0.0
NER	Meghalaya	320	0	6.5	3.9	-0.2	45	0.0
	Mizoram	94	2	1.9	1.1	0.1	26	0.0
	Nagaland	128	1	2.0	1.9	-0.1	21	0.0
	Tripura	228	2	3.5	1.7	0.1	29	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	1.6	-8.3	-11.6
Day neak (MW)	136.1	-393.4	-618.2

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	192.0	-230.2	108.1	-71.7	1.7	-0.1
Actual(MU)	192.6	-237.1	101.4	-60.1	2.5	-0.8
O/D/U/D(MU)	0.5	-6.9	-6.7	11.6	0.8	-0.6

F. Generation Outage(MW)

T. Generation Outage(MIW)						
	NR	WR	SR	ER	NER	Total
Central Sector	4384	12319	5782	1420	155	24060
State Sector	9105	16795	6034	5425	50	37409
Total	13489	29114	11816	6845	204	61469

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	584	1175	563	410	10	2742
Hydro	106	25	48	23	9	212
Nuclear	29	24	64	0	0	117
Gas, Naptha & Diesel	33	41	18	0	24	117
RES (Wind, Solar, Biomass & Others)	35	61	123	2	0	220
Total	787	1327	816	435	43	3408

		<u></u>	AL ALLOY	91112 231	CHANGES	Date of I	Reporting :	11-Jan
	ı				1		•	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/E	Export of	ER (With NR)	D/C	0	313	0.0	7.2	-7.2
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	S/C	0	92	1.7	0.0	1.7
3		GAYA-BALIA	S/C	0	375	0.0	6.7	-6.7
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5		PUSAULI B/B	S/C	0	245	0.0	5.7	-5.7
6 7		PUSAULI-VARANASI	S/C S/C	0	215 104	0.0	0.0	0.0
8		PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	D/C	0	390	0.0	4.3	-4.3
9	400 kV	PATNA-BALIA	Q/C	0	915	0.0	14.6	-14.6
10		BIHARSHARIFF-BALIA	D/C	0	295	0.0	3.3	-3.3
11		MOTIHARI-GORAKHPUR	D/C	0	0	0.0	3.7	-3.7
12		BIHARSHARIFF-VARANASI	D/C	0	361	0.5	0.0	0.5
13	220 kV	PUSAULI-SAHUPURI	S/C	0	0	0.0	0.0	0.0
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15 16	132 kV	GARWAH-RIHAND	S/C S/C	0	0	0.6	0.0	0.6
17	1	KARMANASA-SAHUPURI KARMANASA-CHANDAULI	S/C S/C	0	0	0.0	0.0	0.0
1/	I	IN INVINION-CHAINDAULI	3/C	U	ER-NR	2.8	45.5	-42.7
nport/E	Export of	ER (With WR)		1				
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	0	0	9.2	0.0	9.2
19	, 05 KV	NEW RANCHI-DHARAMJAIGARH	D/C	0	66	6.0	0.0	6.0
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	0	8	3.4	0.0	3.4
21	400 K 1	RANCHI-SIPAT	D/C	0	0	4.8	0.0	4.8
22	220 kV	BUDHIPADAR-RAIGARH	S/C	0	163	0.0	0.9	-0.9
23		BUDHIPADAR-KORBA	D/C	0	0 ER-WR	2.2	0.0	2.2
nport/E	Export of	ER (With SR)			ER-WR	25.7	0.9	24.8
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	0.0	0.0	18.1	-18.1
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	318.4	0.0	14.7	-14.7
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1890.8	0.0	35.5	-35.5
27 28	400 kV 220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	0.0	1093.8	0.0	16.4 0.0	-16.4 0.0
20	220 KV	BALIMELA-UTTER-SILERRU	3/C	0.0	ER-SR	0.0	68.4	-68.4
nport/E	Export of	ER (With NER)				l l		1
29	400 kV	BINAGURI-BONGAIGAON	D/C	0	1061	0.0	6.7	-7
30	400 K	ALIPURDUAR-BONGAIGAON	D/C	0	854	0.0	6.4	-6
31		ALIPURDUAR-SALAKATI	D/C	0		0.0		-3
	220 kV				0 ED MED		2.9	
nnort/F		NED (With ND)			ER-NER	0.0	16.0	-16.0
_	Export of	NER (With NR)			ER-NER	0.0	16.0	1
aport/E	Export of	NER (With NR) BISWANATH CHARIALI-AGRA	-	0				-16.0 -12.1 -12.1
32	Export of HVDC		-		700	0.0	16.0 12.1	-12.1
32	Export of HVDC	BISWANATH CHARIALI-AGRA	- D/C		700	0.0	16.0 12.1	-12.1
32 nport/E	Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR)	D/C D/C	0 0 200	700 NER-NR 1440 250	0.0 0.0 0.0 1.1	16.0 12.1 12.1 52.9 2.8	-12.1 -12.1
32 nport/E 33 34 35	Export of HVDC Export of	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG	D/C D/C	0 0 200 0	700 NER-NR 1440 250 1513	0.0 0.0 0.0 1.1 0.0	16.0 12.1 12.1 52.9 2.8 29.9	-12.1 -12.1 -52.9 -1.7 -29.9
32 aport/E 33 34 35 36	Export of HVDC Export of	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA	D/C D/C D/C	0 200 0	ER-NER 700 NER-NR 1440 250 1513 2822	0.0 0.0 0.0 1.1 0.0 0.0	16.0 12.1 12.1 52.9 2.8 29.9 55.5	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5
32 aport/E 33 34 35 36 37	Export of HVDC 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	0 200 0 0 481	700 NER-NR 1440 250 1513 2822 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1
32 mport/E 33 34 35 36 37 38	Export of 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	D/C D/C D/C D/C S/C	0 200 0 0 481 210	ER-NER 700 NER-NR 1440 250 1513 2822 0 93	0.0 0.0 0.0 1.1 0.0 0.0 0.0 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1
32 mport/E 33 34 35 36 37 38 39	Export of HVDC Export of HVDC	BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C D/C D/C S/C S/C	0 200 0 0 481 210	700 NER-NR 1440 250 1513 2822 0 93 267	0.0 0.0 0.0 1.1 0.0 0.0 0.0 0.0 1.7	12.1 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8
32 mport/E 33 34 35 36 37 38	Export of 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	D/C D/C D/C D/C S/C	0 200 0 0 481 210	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1
32 mport/E 33 34 35 36 37 38 39 40	Export of 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 -BHINMAL VCHAL -RIHAND	D/C D/C D/C D/C S/C S/C S/C	0 200 0 0 481 210 147 484	700 NER-NR 1440 250 1513 2822 0 93 267	0.0 0.0 0.0 1.1 0.0 0.0 0.0 0.0 1.7 0.0 22.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 -22.0
32 mport/E 33 34 35 36 37 38 39 40 41	Export of 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-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR	D/C D/C D/C D/C S/C S/C S/C S/C D/C	0 200 0 0 481 210 147 484	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0	12.1 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0
32 mport/E 33 34 35 36 37 38 39 40 41 42 43 44	Export of 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-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C	0 200 0 0 481 210 147 484 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0	12.1 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 -22.0 -2 1.1
32 apport/E 33 34 35 36 37 38 39 40 41 42 43 44 45	Export of HVDC Export of HVDC - 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	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	0 200 0 0 481 210 147 484 0 89 29 70 28	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0 1.1 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2 0.0 0.2	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2
32 mport/E 33 34 35 36 37 38 39 40 41 42 43 44	Export of 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-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C	0 200 0 0 0 481 210 147 484 0 89 29	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2 0.0 0.0 0.0	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2 0.3
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of 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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 200 0 0 481 210 147 484 0 89 29 70 28	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0 1.1 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2 0.0 0.2	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2
32 aport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of 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	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	0 200 0 0 481 210 147 484 0 89 29 70 28	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2 0.0 0.0 0.0	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2 0.3
32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of 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-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	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	0 200 0 0 481 210 147 484 0 89 29 70 28	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 WR-NR	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 0.0 171.6	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9
32 pport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Export of HVDC Export of HVDC - 765 kV - 400 kV - 220 kV - 132kV Export of HVDC LINK	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	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	0 200 0 0 0 481 210 147 484 0 89 29 70 28 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 WR-NR	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2 0.0 0.2 0.0 0.0 0.0 171.6	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9
32 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC Export of HVDC - 765 kV - 400 kV - 220 kV - 132kV Export of HVDC	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	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	0 200 0 0 481 210 147 484 0 89 70 28 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 WR-NR	0.0 0.0 0.0 1.1 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	16.0 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 2 0.0 0.2 0.0 0.0	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9
32 nport/E 33 34 35 36 37 38 40 41 42 43 44 45 46 47 48 49 50 51	Export of HVDC Export of HVDC - 765 kV - 400 kV - 220 kV - 132kV Export of HVDC LINK	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-KOTA BADOD-WORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RICHUR 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 S/C S/C S/C S/C S/C S/C S	0 200 0 0 481 210 147 484 0 89 29 70 28 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 WR-NR 1000 0 1172 2207 0	0.0 0.0 0.0 1.1 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	12.1 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 0.0 171.6 20.6 0.0 18.1 18.1 18.7 19.0 10	-12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 -22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9 -20.6 0.0 -18.1 -37.7 5.9
32 mport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52	Export of HVDC Export of HVDC 765 kV 400 kV 220 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-RAICAMBAD KOLHAPUR-KUDGI 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 S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 200 0 0 0 481 210 147 484 0 89 29 70 28 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 WR-NR 1000 0 1172 2207 0 0	0.0 0.0 0.0 1.1 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	16.0 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 171.6 20.6 0.0 18.1 37.7 0.0 0.0	-12.1 -12.1 -12.1 -52.9 -1.7 -29.9 -555.5 -27.1 1.7 -0.8 -22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9 -20.6 0.0 -18.1 -37.7 -5.9 0.0
32 **port/E** 33 34 35 36 37 38 39 40 41 42 43 44 45 46 **port/E** 48 49 50 51 51 52 53	Export of HVDC Export of HVDC 765 kV 400 kV 220 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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 200 0 0 0 481 210 147 484 0 89 70 28 0 0 0 376 0 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 WR-NR 1000 0 1172 2207 0 0 0	0.0 0.0 0.0 1.1 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	16.0 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 171.6 20.6 0.0 18.1 37.7 0.0 0.0 0.0 0.0 0.0	-12.1 -12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 -1.7 -0.8 -22.0 -2 -1.1 -0.0 -1.2 -0.3 -0.0 -143.9 -20.6 -0.0 -18.1 -37.7 -5.9 -0.0 -0.0
32 **mport/E** 33 34 35 36 37 38 39 40 41 42 43 44 45 46 **mport/E** 47 48 49 50 51 52	Export of HVDC Export of HVDC 765 kV 400 kV 220 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-RAICAMBAD KOLHAPUR-KUDGI 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 S/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 200 0 0 0 481 210 147 484 0 89 29 70 28 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 WR-NR 1000 0 1172 2207 0 0 0 0 0 0 0 0	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.1 0.2 1.2 1.2 1.2 0.3 0.0 27.7	16.0 12.1 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 171.6 18.1 37.7 0.0 0.0 0.0 0.0 0.0 0.0 0.	-12.1 -12.1 -12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 -22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9 -20.6 0.0 -18.1 -37.7 -5.9 0.0 0.0 0.0 1.5
32 apport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 49 50 51 55 53	Export of HVDC Export of HVDC 765 kV 400 kV 220 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 -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-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	0 200 0 0 481 210 147 484 0 89 29 70 28 0 0 0 376 0 387 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 WR-NR 1000 0 1172 2207 0 0 0 0 WR-SR	0.0 0.0 0.0 1.1 0.0 0.0 1.7 0.0 22.0 0 1.1 0.2 1.2 0.3 0.0 27.7	16.0 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 171.6 20.6 0.0 18.1 37.7 0.0 0.0 0.0 0.0 0.0	-12.1 -12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 -1.7 -0.8 -22.0 -2 -1.1 -0.0 -1.2 -0.3 -0.0 -143.9 -20.6 -0.0 -18.1 -37.7 -5.9 -0.0 -0.0
32 port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	Export of HVDC Export of HVDC 765 kV 400 kV 220 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 -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-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	0 200 0 0 0 481 210 147 484 0 89 70 28 0 0 0 376 0 0	ER-NER 700 NER-NR 1440 250 1513 2822 0 93 267 0 1660 0 46 0 0 WR-NR 1000 0 1172 2207 0 0 0 0 WR-SR	0.0 0.0 0.0 1.1 0.0 0.0 0.0 1.7 0.0 0.0 1.7 0.0 0.0 1.1 0.2 1.2 1.2 1.2 0.3 0.0 27.7	16.0 12.1 12.1 12.1 52.9 2.8 29.9 55.5 27.1 0.0 0.8 0.0 0.2 0.0 0.0 171.6 18.1 37.7 0.0 0.0 0.0 0.0 0.0 0.0 0.	-12.1 -12.1 -12.1 -52.9 -1.7 -29.9 -55.5 -27.1 1.7 -0.8 22.0 -2 1.1 0.0 1.2 0.3 0.0 -143.9 -20.6 0.0 -18.1 -37.7 5.9 0.0 0.0 0.0 1.5