

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: 15th 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 14.01.2018.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 14-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 14th January 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day 15-Jan-18

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	41074	39603	34625	17456	2233	134991
Peak Shortage (MW)	538	31	0	0	34	604
Energy Met (MU)	890	989	843	358	41	3122
Hydro Gen(MU)	101	32	47	26	8	214
Wind Gen(MU)	2	18	36			56
Solar Gen (MU)*	2.90	14.13	43.27	0.62	0.01	61
Energy Shortage (MU)	10.7	0.0	0.1	0.0	0.4	11.2
Maximum Demand Met during the day (MW) (from NLDC SCADA)	45694	47047	39835	18036	2211	148907

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	0.00	5.02	5.02	78.34	16.63

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	5162	0	94.0	16.1	0.5	227	0.0
	Haryana	6527	0	116.2	69.6	1.5	291	0.0
	Rajasthan	11147	0	206.2	75.8	2.7	419	0.0
	Delhi	3932	0	61.7	46.9	-0.9	354	0.0
NR	UP	14369	0	301.5	103.2	0.2	567	0.0
IVIN	Uttarakhand	2050	0	36.9	27.2	0.0	294	0.0
	HP	1467	0	25.5	21.6	0.0	125	0.0
	J&K	2153	538	45.2	44.3	-3.1	118	10.6
	Chandigarh	205	0	3.2	3.7	-0.4	9	0.0
	Chhattisgarh	3241	0	72.2	3.6	-1.5	82	0.0
Gujarat	Gujarat	11414	0	244.4	73.9	-1.5	394	0.0
	MP	11936	0	220.5	131.1	-4.7	286	0.0
MD	Maharashtra	20555	0	410.9	128.3	3.0	478	0.0
WR	Goa	412	0	8.3	7.8	0.2	42	0.0
	DD	296	0	6.3	5.8	0.5	42	0.0
	DNH	721	0	16.7	15.9	0.8	14	0.0
	Essar steel	496	0	10.1	9.8	0.2	180	0.0
	Andhra Pradesh	8339	0	166.9	48.5	5.3	608	0.0
	Telangana	8936	0	171.7	73.4	-3.3	289	0.0
SR	Karnataka	9495	0	196.9	90.4	1.9	407	0.0
3N	Kerala	3160	0	61.8	49.7	0.6	185	0.0
	Tamil Nadu	11265	0	239.9	121.6	3.3	471	0.0
	Pondy	326	0	5.7	6.5	-0.8	30	0.0
	Bihar	3890	0	80.9	74.6	2.5	200	0.0
	DVC	2947	0	69.7	-43.3	-1.1	150	0.0
ER	Jharkhand	1185	0	24.3	13.4	0.5	100	0.0
LN	Odisha	4334	0	77.3	34.6	4.2	500	0.0
	West Bengal	6061	0	104.5	8.7	1.9	380	0.0
	Sikkim	93	0	1.0	1.7	-0.7	10	0.0
	Arunachal Pradesh	114	0	2.3	1.9	0.4	39	0.0
	Assam	1306	16	22.2	18.4	0.8	135	0.3
	Manipur	192	0	2.6	3.0	-0.4	25	0.0
NER	Meghalaya	298	0	6.4	4.0	-0.2	45	0.0
NEK	Mizoram	88	2	1.8	1.1	0.1	22	0.0
	Nagaland	132	0	2.1	2.0	0.0	38	0.0
	Tripura	209	0	3.9	1.8	0.4	55	0.0

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

<u> </u>	Bhutan	Nepal	Bangladesh
Actual(MU)	2.7	-10.6	-11.7
Day peak (MW)	137.8	-503.5	-623.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	178.2	-221.7	108.0	-68.4	3.2	-0.7
Actual(MU)	167.4	-227.1	103.2	-54.4	3.3	-7.5
O/D/U/D(MU)	-10.8	-5.4	-4.8	14.0	0.1	-6.9

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	3890	14121	7022	2245	257	27535
State Sector	9260	16232	6960	5275	50	37777
Total	13150	30353	13982	7520	306	65312

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	558	1118	488	408	8	2580
Hydro	101	30	47	26	8	212
Nuclear	29	24	69	0	0	122
Gas, Naptha & Diesel	29	38	18	0	25	110
RES (Wind, Solar, Biomass & Others)	30	32	121	2	0	184
Total	747	1242	742	437	41	3209

Page							Date of I	Reporting	: 15-Jan
No.									Import=(+ve) /Export =(-ve) for NET (ML)
PARTIES PART	Sl No		Line Details	Circuit	Import	Max Export (MW)	Import (MU)	-	NET
2	nport/F		ER (With NR)		(1 V1 VV)			(MC)	(WIC)
Teach	1								+
1		765kV							
S		 		- S/C					
Teach		HVDC		S/C		247			
MICHAPLANIZIA GORANIPUR DC		_							
9		_				-			
		100 12							
MOTHARSHORACHUS] 7 00 K V	<u> </u>	_ `					
13	11	1			0				
	12	1	BIHARSHARIFF-VARANASI	D/C	0	371	1.6	0.0	1.6
Section Sect	13	220 kV	PUSAULI-SAHUPURI	S/C	0	0	0.0	0.0	0.0
		_				<u> </u>		0.0	
T		132 kV							
Part		-							
Part	1 /		KAKMANASA-CHANDAULI	S/C	U	L			
18	mort/F	Export of	ER (With WR)			rk-NK	4.5	43./	-39.3
19	_	_		D/C	Ω	0	0.0	0.0	0.0
Milarian Milarian		765 kV			_				
100 kK RANCHISHPAT D/C 0 0 4.5 0.0 4.5		 				+			
Page	21	400 kV		_ `		<u> </u>			
SECOND December	22	220 1-37	BUDHIPADAR-RAIGARH	S/C	0	185	0.0	1.5	-1.5
Prof Export of Ex (With SR) 76 kV ANGIL-SRIKAKULAM	23	220 KV	BUDHIPADAR-KORBA	D/C	0	0	2.2	0.0	2.2
ASSEST						ER-WR	25.3	1.5	23.8
Second S	_	T		1 1	0.0	T 00	0.0	10.0	1 400
20									
27		 							
220 KV BALIMELA-UPPER SHERRU S/C 0.0 0.0 0.0 0.0 0.0 0.0									
Part									
Martical Color						ER-SR	0.0	68.7	-68.7
March Marc	nport/F	Export of	ER (With NER)						_
1		400 kV							-
Part		220 1-37							
	31	220 KV	ALIFORDUAK-SALAKATI	D/C	U				
Net		Export of	NER (With NR)			211 1 (211	0.0		1.07
Part	nport/E		,						
Hype Champa-kurukshetra D/C 0 1409 0.0 49.5 -49.5		HVDC	BISWANATH CHARIALI-AGRA	-	0	601	0.0	14.4	-14.4
HyDC		HVDC	BISWANATH CHARIALI-AGRA	-	0				
APL-MHG	32	1	L	-	0				
Total Tota	32 nport/E 33	Export of	WR (With NR) CHAMPA-KURUKSHETRA	D/C	0	NER-NR 1409	0.0	14.4 49.5	-14.4 -49.5
765 kV PHAGI-GWALIOR	32 nport/E 33 34	Export of	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	0 250	NER-NR 1409 0	0.0 0.0 5.7	49.5 0.0	-49.5 5.7
ABOD AURILLA S/C 175 88 1.3 0.0 1.3	32 aport/E 33 34 35	Export of	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG	D/C D/C D/C	0 250 0	NER-NR 1409 0 1412	0.0 0.0 5.7 0.0	49.5 0.0 28.4	-14.4 -49.5 5.7 -28.4
March Marc	32 aport/E 33 34 35 36	Export of HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C D/C	0 250 0 0	NER-NR 1409 0 1412 2456	0.0 5.7 0.0 0.0	49.5 0.0 28.4 49.2	-49.5 5.7 -28.4 -49.2
400 kV No. N	32 aport/E 33 34 35 36 37	Export of HVDC	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	0 250 0 0 484	NER-NR 1409 0 1412 2456 0	0.0 5.7 0.0 0.0 0.0 0.0	49.5 0.0 28.4 49.2 27.2	-14.4 -49.5 5.7 -28.4 -49.2 -27.2
BADOD-KOTA S/C 77	32 aport/E 33 34 35 36 37 38	Export of HVDC 765 kV	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 S/C	0 250 0 0 484 175	NER-NR 1409 0 1412 2456 0 88	0.0 5.7 0.0 0.0 0.0 1.3	49.5 0.0 28.4 49.2 27.2 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3
March Marc	32 33 34 35 36 37 38 39	Export of HVDC 765 kV	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 C D/C S/C S/C	0 250 0 0 484 175 110	NER-NR 1409 0 1412 2456 0 88 263	0.0 5.7 0.0 0.0 0.0 1.3 0.0	49.5 0.0 28.4 49.2 27.2 0.0 1.3	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3
MEHGAON-AURAIYA S/C 101 0 1.7 0.0 1.7 MALANPUR-AURAIYA S/C 54 0 0.7 0.0 0.0 46 132kV GWALIOR-SAWAI MADHOPUR S/C 0 0 0 0.0 0.0 WR-NR 32.5 158.1 -125.7 POPTI/Export of WR (With SR) 47	32 33 34 35 36 37 38 39	Export of HVDC 765 kV	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 S/C S/C S/C	0 250 0 0 484 175 110 486	NER-NR 1409 0 1412 2456 0 88 263 0	0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8
MEHGAON-AURAIYA S/C 101 0 1.7 0.0 1.7 45	32 33 34 35 36 37 38 39 40 41 42	Export of HVDC 765 kV	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	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 250 0 0 484 175 110 486 0 77	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1
Mar.	32 aport/E 33 34 35 36 37 38 39 40 41 42 43	HVDC 765 kV	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	D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 250 0 0 484 175 110 486 0 77 28	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39	0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0
WR-NR 32.5 158.1 -125.7	32 nport/E 33 34 35 36 37 38 39 40 41 42 43 44	HVDC 765 kV	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	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	0 250 0 0 484 175 110 486 0 77 28 101	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0	0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7
Name	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45	Export of HVDC 765 kV 400 kV	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	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	0 250 0 0 484 175 110 486 0 77 28 101 54	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0	0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7
HVDC BHADRAWATI B/B - 0 1000 0.0 21.2 -21.2	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45	Export of HVDC 765 kV 400 kV	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	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	0 250 0 0 484 175 110 486 0 77 28 101 54	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 0	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0
LINK BARSUR-L.SILERU	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC 765 kV 400 kV 220 kV	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	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	0 250 0 0 484 175 110 486 0 77 28 101 54	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 0	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0
TRANSNATIONAL EXCHANGE Translational exception Transnational exc	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC 765 kV 400 kV 220 kV 132kV	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	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	0 250 0 0 484 175 110 486 0 77 28 101 54	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7
50 WARDHA-NIZAMABAD D/C 0 2293 0.0 38.0 -38.0 51 400 kV KOLHAPUR-KUDGI D/C 219 93 1.6 0.2 1.4 52 KOLHAPUR-CHIKODI D/C 0 0 0.0 0.0 0.0 53 220 kV PONDA-AMBEWADI S/C 0 0 0.0 0.0 0.0 54 XELDEM-AMBEWADI S/C 73 0 1.5 0.0 1.5 WR-SR 3.1 81.1 -78.0 TRANSNATIONAL EXCHANGE	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC	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	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	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7
52 KOLHAPUR-CHIKODI D/C 0 0 0.0 0.0 0.0 53 PONDA-AMBEWADI S/C 0 0 0.0 0.0 0.0 54 XELDEM-AMBEWADI S/C 73 0 1.5 0.0 1.5 WR-SR 3.1 81.1 -78.0 TRANSNATIONAL EXCHANGE 55 BHUTAN	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK	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 S/C S/C S/C S/C S/C S/C S/C S/C	0 250 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7
53 220 kV PONDA-AMBEWADI S/C 0 0 0.0 0.0 0.0 54 XELDEM-AMBEWADI S/C 73 0 1.5 0.0 1.5 WR-SR 3.1 81.1 -78.0 TRANSNATIONAL EXCHANGE 55 BHUTAN	32 aport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/F 47 48 49 50	Export of HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV	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 WARDHA-NIZAMABAD	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	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0
54 XELDEM-AMBEWADI S/C 73 0 1.5 0.0 1.5 WR-SR 3.1 81.1 -78.0 TRANSNATIONAL EXCHANGE 55 BHUTAN	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/E 47 48 49 50 51	Export of HVDC 765 kV 400 kV 220 kV 132kV Export of HVDC LINK 765 kV	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 WARDHA-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	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293 93	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5 0.0 0.0 0.0 1.6	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0 0.2	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0 1.4
WR-SR 3.1 81.1 -78.0 TRANSNATIONAL EXCHANGE 55 BHUTAN	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/E 47 48 49 50 51 52	Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 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 S/C S/C S	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293 93 0	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5 0.0 0.0 0.0 1.6 0.0	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0 0.2 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0 1.4 0.0
TRANSNATIONAL EXCHANGE 55 BHUTAN	32 aport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/F 47 48 49 50 51 52 53	Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 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 S/C S/C S	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293 93 0 0	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0 0.2 0.0 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0 1.4 0.0 0.0
55 BHUTAN	32 aport/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 aport/E 47 48 49 50 51 52	Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 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 S/C S/C S	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293 93 0 0 0	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5 0.0 0.0 0.0 0.0 1.6 0.0 0.0 1.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0 0.2 0.0 0.0 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0 1.4 0.0 0.0 1.5
	32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53	Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 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 S/C S/C S	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293 93 0 0 0 WR-SR	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5 0.0 0.0 0.0 0.0 1.6 0.0 0.0 1.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0 0.2 0.0 0.0 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0 1.4 0.0 0.0 1.5
INTERAL	32 port/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 port/E 47 48 49 50 51 52 53 54	Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK 765 kV 400 kV	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 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 S/C S/C S	0 250 0 0 484 175 110 486 0 77 28 101 54 0	NER-NR 1409 0 1412 2456 0 88 263 0 1643 0 39 0 0 WR-NR 1000 0 1438 2293 93 0 0 0 WR-SR	0.0 0.0 5.7 0.0 0.0 0.0 1.3 0.0 21.8 0 1.1 0.2 1.7 0.7 0.0 32.5 0.0 0.0 0.0 0.0 1.6 0.0 0.0 1.5	14.4 49.5 0.0 28.4 49.2 27.2 0.0 1.3 0.0 2 0.0 0.2 0.0 0.0 158.1 21.2 0.0 21.8 38.0 0.2 0.0 0.0 0.0 0.0	-14.4 -49.5 5.7 -28.4 -49.2 -27.2 1.3 -1.3 21.8 -2 1.1 0.0 1.7 0.7 0.0 -125.7 -21.2 0.0 -21.8 -38.0 1.4 0.0 0.0 1.5