

## 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: 10<sup>th</sup> Feb 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 09.02.2018.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-Feb - 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 09<sup>th</sup> Feb 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day 10-Feb-18

## A. Maximum Demand

Tit Maximum Demand						
	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	43945	43646	40891	18660	2371	149514
Peak Shortage (MW)	783	64	0	300	52	1198
Energy Met (MU)	946	1042	931	360	41	3319
Hydro Gen(MU)	95	24	62	31	9	220
Wind Gen(MU)	2	14	13			29
Solar Gen (MU)*	8.28	17.92	40.20	0.53	0.02	67
Energy Shortage (MU)	17.8	0.0	2.0	0.9	0.5	21.2
Maximum Demand Met during the day (MW) (from NLDC SCADA)	47564	48620	44177	18681	2343	155434

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	0.072	0.00	1.75	20.78	22.52	72.44	5.03

**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	5995	0	128.1	45.8	-0.7	126	0.0
	Haryana	6985	33	130.7	68.6	1.9	232	0.1
	Rajasthan	10344	1888	208.1	70.2	4.3	406	6.4
	Delhi	3880	0	66.5	52.4	0.4	248	0.0
NR	UP	14751	520	298.1	104.2	-0.6	354	0.5
	Uttarakhand	2053	0	37.1	27.9	1.1	215	0.0
	HP	1555	0	28.1	22.7	1.8	313	0.0
	J&K	2183	546	45.8	42.8	-0.8	103	10.8
	Chandigarh	225	0	3.4	3.1	0.3	41	0.0
	Chhattisgarh	3402	0	77.3	10.3	-0.7	117	0.0
	Gujarat	13950	0	298.8	131.0	5.6	590	0.0
	MP	11132	0	209.8	115.0	-1.7	407	0.0
WD	Maharashtra	19994	0	411.0	122.5	-1.3	355	0.0
WR	Goa	474	0	9.7	8.8	0.3	38	0.0
	DD	328	0	7.4	7.0	0.4	54	0.0
	DNH	751	0	17.5	16.9	0.6	64	0.0
	Essar steel	467	0	10.2	10.2	0.0	164	0.0
	Andhra Pradesh	8219	0	170.3	57.3	1.1	520	0.4
	Telangana	9565	0	188.9	81.9	1.2	438	0.3
SR	Karnataka	10169	0	209.2	93.8	-2.4	509	0.4
3N	Kerala	3361	0	68.9	55.0	1.3	232	0.2
	Tamil Nadu	14000	0	286.3	167.2	-0.2	349	0.7
	Pondy	346	0	7.0	7.4	-0.4	29	0.0
	Bihar	4131	0	67.3	61.9	-0.8	220	0.0
	DVC	3054	0	69.7	-43.9	-2.0	225	0.0
ER	Jharkhand	1125	0	22.9	14.6	0.5	55	0.0
LIX	Odisha	4268	0	79.0	36.8	2.6	250	0.9
	West Bengal	6694	0	119.4	20.2	1.3	220	0.0
	Sikkim	112	0	1.8	1.2	0.5	10	0.0
	<b>Arunachal Pradesh</b>	120	2	2.4	2.0	0.4	44	0.0
	Assam	1419	18	22.8	19.6	0.5	104	0.4
	Manipur	180	3	2.7	2.7	0.0	17	0.0
NER	Meghalaya	297	0	5.4	3.7	0.0	38	0.0
	Mizoram	90	1	1.6	0.9	0.0	24	0.0
	Nagaland	117	4	2.3	2.0	0.2	40	0.0
	Tripura	227	2	3.7	2.2	-0.2	43	0.0

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

D. Transnational Exchanges (1710) Impor	Bhutan	Nepal	Bangladesh
Actual(MU)	1.9	-10.2	-9.2
Day peak (MW)	114.6	-293.6	-602.3

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	202.3	-219.0	122.0	-94.0	2.7	13.9
Actual(MU)	195.0	-243.9	127.7	-82.1	2.0	-1.4
O/D/U/D(MU)	-7.3	-24.9	5.7	11.9	-0.7	-15.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4717	12581	5522	1430	341	24591
State Sector	10610	17532	6290	5245	50	39727
Total	15327	30113	11812	6675	391	64318

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	589	1183	580	438	10	2800
Hydro	95	23	62	31	8	219
Nuclear	29	24	69	0	0	121
Gas, Naptha & Diesel	22	45	18	0	24	109
RES (Wind, Solar, Biomass & Others)	37	32	99	2	0	169
Total	771	1307	828	470	42	3418

		INTE	ER-REGIO	ONAL EX	<u>CHANGES</u>	Date of I	Reporting :	10-Feb-18
Sl No	Voltage	Line Details	Circuit	Max Import	Max Export (MW)	Import (MU)	Export	Import=(+ve) /Export =(-ve) for NET (MU)  NET
T 04/T	Level	ED (W:41 ND)		(MW)			(MU)	(MU)
mport/E	export of	ER (With NR) GAYA-VARANASI	D/C	0	335	0.0	8.2	-8.2
2	765kV	SASARAM-FATEHPUR	S/C	0	116	0.1	0.0	0.1
3		GAYA-BALIA	S/C	0	355	0.0	5.2	-5.2
5	HVDC	ALIPURDUAR-AGRA	- 0/0	0	0	0.0	0.0	0.0
6		PUSAULI B/B PUSAULI-VARANASI	S/C S/C	0	337 249	0.0	0.0	-8.3 0.0
7	1	PUSAULI -ALLAHABAD	S/C	0	153	0.0	0.0	0.0
8	1	MUZAFFARPUR-GORAKHPUR	D/C	0	342	0.0	4.6	-4.6
9	400 kV	PATNA-BALIA	Q/C	0	926	0.0	13.9	-13.9
10	]	BIHARSHARIFF-BALIA	D/C	0	297	0.0	4.1	-4.1
11		MOTIHARI-GORAKHPUR	D/C	0	0	0.0	6.2	-6.2
12		BIHARSHARIFF-VARANASI	D/C	0	252	0.0	0.9	-0.9
13	220 kV	PUSAULI-SAHUPURI	S/C	0	164	0.0	3.2	-3.2
14	-	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15 16	132 kV	GARWAH-RIHAND KARMANASA-SAHUPURI	S/C S/C	0	0	0.4	0.0	0.4
17	1	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
1/	1		D/C	<u> </u>	ER-NR	0.5	54.7	-54.2
Import/F	Export of	ER (With WR)			221114	<del>-</del>		
18		JHARSUGUDA-DHARAMJAIGARH S/C	D/C	0	0	17.1	0.0	17.1
19	765 kV	NEW RANCHI-DHARAMJAIGARH	D/C	0	450	0.0	3.9	-3.9
20		JHARSUGUDA-RAIGARH	Q/C	0	0	8.4	0.0	8.4
21	400 kV	RANCHI-SIPAT	D/C	0	102	0.8	0.0	0.8
22	220 1-37	BUDHIPADAR-RAIGARH	S/C	0	89	0.0	0.7	-0.7
23	220 kV	BUDHIPADAR-KORBA	D/C	0	0	4.7	0.0	4.7
					ER-WR	31.0	4.6	26.4
	<del>, -</del>	ER (With SR)		0.0		2.2	10.1	10.4
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	0.0	0.0	19.4	-19.4
25 26	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	0.0	347.1 2405.3	0.0	15.2 51.1	-15.2 -51.1
27	400 kV	TALCHER-I/C	D/C D/C	0.0	834.4	0.0	12.1	-31.1
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0	0.0	0.0	0.0
		Z. Z. S.Z. S.Z. S.Z. S.Z. S.Z. S.Z. S.Z	<i>5,</i> 0	0.0	ER-SR	0.0	85.7	-85.7
Import/F	Export of	ER (With NER)			_	_		•
29	400 kV	BINAGURI-BONGAIGAON	D/C	0	1080	0.0	5.9	-6
30	400 K V	ALIPURDUAR-BONGAIGAON	D/C	0	877	3.9		4
31	220 kV	ALIPURDUAR-SALAKATI	D/C	0	0	0.0	2.1	-2
	7				ER-NER	3.9	8.0	-4.1
Import/E	I'vnort of							
20	<del>, -</del>	NER (With NR)	T	0	501	0.0	0.6	0.6
32	HVDC	NER (With NR) BISWANATH CHARIALI-AGRA		0	501 NER-NR	0.0	9.6	-9.6 - <b>9.</b> 6
	HVDC	BISWANATH CHARIALI-AGRA	-	0	501 NER-NR	0.0	9.6 <b>9.6</b>	-9.6 - <b>9.6</b>
Import/E	HVDC	BISWANATH CHARIALI-AGRA  WR (With NR)			NER-NR	0.0	9.6	-9.6
	HVDC	BISWANATH CHARIALI-AGRA	D/C D/C	0 0 250				
Import/E	HVDC Export of	BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA	D/C	0	NER-NR 1437	0.0	<b>9.6</b> 56.5	<b>-9.6</b> -56.5
33 34	Export of HVDC	BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  V'CHAL B/B	D/C D/C	0 250	NER-NR  1437 0	0.0 0.0 5.5	<b>9.6</b> 56.5 0.0	-9.6 -56.5 5.5
33 34 35	HVDC Export of	BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  V'CHAL B/B  APL -MHG	D/C D/C D/C	0 250 0	NER-NR  1437  0 1211	0.0 0.0 5.5 0.0	9.6 56.5 0.0 21.7	-9.6 -56.5 5.5 -21.7
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 S/C	0 250 0 0 0 242	NER-NR  1437 0 1211 2688 1540 0	0.0 5.5 0.0 0.0 0.0 3.1	9.6 56.5 0.0 21.7 53.3 31.0 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1
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	0 250 0 0 0 242 192	NER-NR  1437 0 1211 2688 1540 0 149	0.0 5.5 0.0 0.0 0.0 3.1 0.6	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6
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 S/C S/C S/C	0 250 0 0 0 242 192 0	NER-NR  1437 0 1211 2688 1540 0 149 487	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0
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 S/C S/C S/C S/C D/C	0 250 0 0 0 242 192 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0 0.0 3	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3
33 34 35 36 37 38 39 40 41 42	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  BADOD-KOTA	D/C D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 250 0 0 0 242 192 0 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0 0.0 3 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1
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  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 D/C S/C S/C S/C S/C S/C S/C S/C	0 250 0 0 0 242 192 0 0 101 54	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32	0.0 0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0 0.0 0.0 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2
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 -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 0 242 192 0 0 101 54 95	NER-NR  1437  0 1211 2688 1540 0 149 487 375 0 32 0	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0 3 0.0 0.1 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6
33 34 35 36 37 38 39 40 41 42 43 44 45	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 -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 S/C S/C	0 250 0 0 0 242 192 0 0 101 54 95 52	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0 0.0 0.0 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2
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 -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 0 242 192 0 0 101 54 95	NER-NR  1437  0 1211 2688 1540 0 149 487 375 0 32 0	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6	9.6 56.5 0.0 21.7 53.3 31.0 0.0 0.0 3 0.0 0.1 0.0 0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC  Export of  HVDC  765 kV  400 kV  132kV	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	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 0 242 192 0 0 101 54 95 52	NER-NR  1437  0 1211 2688 1540 0 149 487 375 0 32 0 0 0	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7 0.0	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  0.0  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46	HVDC  Export of  HVDC  765 kV  400 kV  132kV	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	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 0 242 192 0 0 101 54 95 52	NER-NR  1437  0 1211 2688 1540 0 149 487 375 0 32 0 0 0	0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7 0.0	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  0.0  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E	HVDC  Export of  HVDC  765 kV  400 kV  220 kV  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-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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 0 WR-NR	0.0 0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7 0.0 35.9	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  0.0  0.0  0.1  0.0  0.0  165.8	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 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	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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR	0.0 0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7 0.0 35.9	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 47 48 49 50	HVDC  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	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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042	0.0 0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7 0.0 35.9	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 47 48 49 50 51	HVDC  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  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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0	0.0 0.0 5.5 0.0 0.0 0.0 3.1 0.6 23.0 0 1.1 0.3 1.6 0.7 0.0 35.9	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/F 47 48 49 50 51 52	HVDC  Export of  HVDC  765 kV  400 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  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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0 0	0.0  0.0  5.5  0.0  0.0  0.0  3.1  0.6  23.0  0  1.1  0.3  1.6  0.7  0.0  35.9   0.0  0.0  0.0  0.0  0.0  0.0  0.0	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0  0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 47 48 49 50 51 52 53	HVDC  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-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 0 242 192 0 0 101 54 95 52 0 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0 0 0	0.0  0.0  5.5  0.0  0.0  0.0  3.1  0.6  23.0  0  1.1  0.3  1.6  0.7  0.0  35.9   0.0  0.0  0.0  0.0  0.0  0.0  0.0	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0  0.0  0.0  0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/F 47 48 49 50 51 52	HVDC  Export of  HVDC  765 kV  400 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  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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0 0 0	0.0  0.0  5.5  0.0  0.0  0.0  3.1  0.6  23.0  0  1.1  0.3  1.6  0.7  0.0  35.9   0.0  0.0  0.0  0.0  0.0  0.0  1.3	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0  0.0  0.0  1.3
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 47 48 49 50 51 52 53	HVDC  Export of  HVDC  765 kV  400 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-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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0 0 0 WR-SR	0.0  0.0  5.5  0.0  0.0  0.0  3.1  0.6  23.0  0  1.1  0.3  1.6  0.7  0.0  35.9   0.0  0.0  0.0  0.0  0.0  0.0  0.0	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0  0.0  0.0  0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 47 48 49 50 51 52 53 54	HVDC  Export of  HVDC  765 kV  400 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-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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0 0 0 WR-SR	0.0  0.0  5.5  0.0  0.0  0.0  3.1  0.6  23.0  0  1.1  0.3  1.6  0.7  0.0  35.9   0.0  0.0  0.0  0.0  0.0  0.0  1.3	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0  0.0  0.0  1.3  -91.7
33 34 35 36 37 38 39 40 41 42 43 44 45 46  Import/E 47 48 49 50 51 52 53	HVDC  Export of  HVDC  765 kV  400 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-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 0 242 192 0 0 101 54 95 52 0	NER-NR  1437 0 1211 2688 1540 0 149 487 375 0 32 0 0 WR-NR  1000 0 1606 2042 0 0 0 WR-SR	0.0  0.0  5.5  0.0  0.0  0.0  3.1  0.6  23.0  0  1.1  0.3  1.6  0.7  0.0  35.9   0.0  0.0  0.0  0.0  0.0  0.0  1.3	9.6  56.5  0.0  21.7  53.3  31.0  0.0  0.0  0.0  3  0.0  0.1  0.0  0.0	-9.6  -56.5  5.5  -21.7  -53.3  -31.0  3.1  0.6  23.0  -3  1.1  0.2  1.6  0.7  0.0  -129.9  -24.0  0.0  -28.1  -40.9  0.0  0.0  0.0  1.3