

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: 12th June 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 11.06.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 11-जून-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 11th June 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day 12-Jun-18

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	52348	45531	39649	19375	2593	159496
Peak Shortage (MW)	369	32	0	0	110	511
Energy Met (MU)	1209	1074	810	440	48	3582
Hydro Gen (MU)	321	13	55	79	17	486
Wind Gen (MU)	38	169	215			422
Solar Gen (MU)*	19.00	16.88	40.05	0.60	0.01	77
Energy Shortage (MU)	7.3	0.0	0.0	0.0	1.7	9.0
Maximum Demand Met during the day	57208	46453	40268	20583	2639	163568
(MW) & time (from NLDC SCADA)	22:55	15:20	19:36	20:21	18:59	21:18

B. Frequency Profile (%)

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Region	FVI	<49.7	49.7-49.8	49.8-49.9	<49.9	49.9-50.05	> 50.05
All India	0.021	0.00	0.00	2.27	2.27	86.24	11.49

C. Power Supply Position in States

Region	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	8168	0	174.3	103.6	-0.3	0	0.0
	Haryana	7739	0	161.5	123.6	3.2	359	1.3
	Rajasthan	10151	0	220.2	67.9	0.0	410	0.0
	Delhi	6317	0	126.4	102.9	-2.5	120	0.1
NR	UP	19623	0	408.5	178.0	0.7	270	0.0
	Uttarakhand	2077	0	43.6	18.5	0.8	246	0.0
	HP	1378	0	26.5	3.1	0.5	71	0.0
	J&K	2087	522	42.0	21.6	-4.4	0	5.8
	Chandigarh	322	0	6.2	6.8	-0.5	14	0.0
	Chhattisgarh	3174	0	71.9	16.6	-2.5	286	0.0
	Gujarat	16669	0	364.1	128.5	9.5	475	0.0
	MP	7555	0	164.7	48.2	-0.9	462	0.0
\A/D	Maharashtra	18849	0	429.4	118.9	-0.9	587	0.0
WR	Goa	496	0	10.6	8.2	1.7	40	0.0
	DD	337	0	7.5	6.7	0.8	58	0.0
	DNH	774	0	18.0	17.3	0.7	75	0.0
	Essar steel	415	0	7.9	7.9	0.0	153	0.0
	Andhra Pradesh	6711	0	153.7	14.8	-0.9	491	0.0
	Telangana	6990	0	124.9	50.7	-0.7	560	0.0
SR	Karnataka	7496	0	147.4	36.8	-6.3	340	0.0
3N	Kerala	3389	0	62.5	42.1	1.2	200	0.0
	Tamil Nadu	15050	0	313.5	101.5	0.5	516	0.0
	Pondy	383	0	8.0	8.3	-0.3	25	0.0
	Bihar	4697	0	90.1	88.3	-0.8	385	0.0
	DVC	2972	0	70.4	-28.0	-0.5	375	0.0
ER	Jharkhand	1131	0	22.1	16.6	2.0	156	0.0
LN	Odisha	4557	0	91.8	47.0	0.8	356	0.0
	West Bengal	7681	0	164.7	56.2	1.9	435	0.0
	Sikkim	83	0	1.2	1.3	-0.2	20	0.0
	Arunachal Pradesh	116	6	1.8	2.2	-0.5	14	0.0
	Assam	1689	69	32.5	25.7	3.0	139	1.4
	Manipur	157	4	1.7	2.4	-0.7	14	0.0
NER	Meghalaya	309	0	5.2	2.1	-0.2	37	0.0
	Mizoram	78	3	1.4	1.1	-0.1	5	0.0
	Nagaland	147	2	2.3	1.8	0.4	36	0.0
	Tripura	226	10	3.4	4.1	-1.1	30	0.2

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	16.0	-7.2	-11.7
Day peak (MW)	835.6	-459.7	-686.5

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	247.5	-247.2	17.7	-23.8	7.4	1.6
Actual(MU)	250.8	-240.4	7.2	-19.0	5.2	3.7
O/D/U/D(MU)	3.3	6.8	-10.6	4.8	-2.2	2.1

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4425	13056	8902	1890	196	28469
State Sector	7185	16875	9230	5095	50	38435
Total	11610	29931	18132	6985	246	66904

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Thermal (Coal & Lignite)	532	1051	411	404	8	2404
Hydro	321	13	56	79	17	487
Nuclear	30	30	46	0	0	107
Gas, Naptha & Diesel	31	50	11	0	22	113
RES (Wind, Solar, Biomass & Others)	71	186	289	1	0	547
Total	985	1329	813	484	46	3658
Share of RES in total generation (%)	7.22	13.96	35,55	0.22	0.07	14.95

Share of RES in total generation (%)	7.22	13.96	35.55	0.22	0.07	14.95
Share of Non-fossil fuel (Hydro, Nuclear and	42.80	17 01	10 21	16 61	26.26	21 10
RES) in total generation (%)	42.89	17.21	48.21	16.61	36.36	31.18

H. Diversity Factor

nd Diversity Factor 1.022

Diversity factor = Sum of regional maximum demands / All India maximum demand

		INTER-REGIONAL EXCHANGES Date of Reporting:						12-Jun-18
								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)
Import/F	Export of	ER (With NR) GAYA-VARANASI	D/C	47	341	0.0	4.0	-4.0
2	765kV	SASARAM-FATEHPUR	S/C	181	80	0.0	0.0	0.8
3		GAYA-BALIA	S/C	0	497	0.0	8.5	-8.5
4	HVDC	ALIPURDUAR-AGRA	- 5/0	0	287	0.0	9.6	-9.6
5 6		PUSAULI B/B PUSAULI-VARANASI	S/C S/C	0	49 96	0.0	0.0	-1.3
7	†	PUSAULI -ALLAHABAD	S/C	36	21	0.0	0.0	0.0
8]	MUZAFFARPUR-GORAKHPUR	D/C	0	602	0.0	6.6	-6.6
9	400 kV	PATNA-BALIA	Q/C	0	684	0.0	8.8	-8.8
10	-	BIHARSHARIFF-BALIA	D/C	0	378	0.0	5.0	-5.0
11	_	MOTIHARI-GORAKHPUR BIHARSHARIFF-VARANASI	D/C D/C	3 471	255	0.0	3.5 0.0	-3.5 0.5
13	220 kV	PUSAULI-SAHUPURI	S/C	0	212	0.0	4.3	-4.3
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	35	0	0.3	0.0	0.3
16	- 132 KV	KARMANASA-SAHUPURI	S/C	0	34	0.4	0.0	0.4
17		KARMANASA-CHANDAULI	S/C	0	0 ER-NR	0.0 2.0	0.0 51.6	0.0 -49.6
Import/I	Export of	ER (With WR)	<u> </u>		T	 		T
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	931	0	23.1	0.0	23.1
19	1	NEW RANCHI-DHARAMJAIGARH	D/C	873	0	16.5	0.0	16.5
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	1007	0	19.8	0.0	19.8
21 22	1	RANCHI-SIPAT BUDHIPADAR-RAIGARH	D/C S/C	426 127	5	8.1 0.0	0.0	-1.9
23	220 kV	BUDHIPADAR-KORBA	D/C	152	0	0.0	2.7	-2.7
Import/I	Export of	ER (With SR)			ER-WR	67.5	4.5	62.9
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1518.8	0.0	18.7	-18.7
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	317.2	0.0	7.5	-7.5
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1286.7	0.0	31.1	-31.1
27	400 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	905.7	0.8	0.0	15.0	-15.0
28	220 kV	DALIMELA-UPPER-SILERRU	S/C	0.0	0.0 ER-SR	0.0 0.0	0.0 57.3	-57.3
Import/I	Export of	ER (With NER)						ļ
29	400 kV	BINAGURI-BONGAIGAON	D/C	0	508	0.0	8.4	-8
30		ALIPURDUAR-BONGAIGAON	D/C	0	263	0.0	3.6	-4
31	220 kV	ALIPURDUAR-SALAKATI	D/C	0	139 ER-NER	0.0 0.0	1.9 13.9	-2 -13.9
Import/F	1 -	NER (With NR)		0		0.0	12.0	-12.0
32	HVDC	BISWANATH CHARIALI-AGRA	-		500	0.0	12.0	12.0
			-		500 NER-NR	0.0	12.0	-12.0
Import/I		WR (With NR)		0	NER-NR	0.0	12.0	-12.0
Import/F	Export of	WR (With NR) CHAMPA-KURUKSHETRA	D/C	0	NER-NR 213	0.0	12.0 32.8	-12.0 -32.8
Import/I	Export of	WR (With NR)		0 250 0	NER-NR	0.0	12.0	-12.0
33 34	Export of	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B	D/C D/C	250	213 250	0.0 0.0 4.1	32.8 1.8	-12.0 -32.8 2.3
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	250 0 0 0	213 250 1814 2562 1636	0.0 0.0 4.1 0.0 0.0 0.0	32.8 1.8 38.0 47.3 29.9	-12.0 -32.8 2.3 -38.0 -47.3 -29.9
33 34 35 36 37 38	Export of	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C D/C D/C D/C D/C D/C	250 0 0 0 0	213 250 1814 2562 1636 1257	0.0 0.0 4.1 0.0 0.0 0.0 0.0	32.8 1.8 38.0 47.3 29.9 23.8	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8
33 34 35 36 37 38 39	Export of HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C D/C D/C D/C C D/C S/C	250 0 0 0 0 0	NER-NR 213 250 1814 2562 1636 1257 1948	0.0 4.1 0.0 0.0 0.0 0.0 9.8	32.8 1.8 38.0 47.3 29.9 23.8 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8
33 34 35 36 37 38 39 40	Export of HVDC	WR (With NR) CHAMPA-KURUKSHETRA 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	250 0 0 0 0 0 0 469	213 250 1814 2562 1636 1257 1948 0	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1
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 JABALPUR-ORAI GWALIOR-ORAI	D/C D/C D/C D/C D/C C D/C S/C	250 0 0 0 0 0	NER-NR 213 250 1814 2562 1636 1257 1948	0.0 4.1 0.0 0.0 0.0 0.0 9.8	32.8 1.8 38.0 47.3 29.9 23.8 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8
33 34 35 36 37 38 39 40 41	Export of HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI	D/C D/C D/C D/C D/C S/C S/C S/C	250 0 0 0 0 0 0 469 482	213 250 1814 2562 1636 1257 1948 0 0	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0 6.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0
33 34 35 36 37 38 39 40 41 42 43 44	Export of HVDC 765 kV	WR (With NR) CHAMPA-KURUKSHETRA 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 D/C S/C S/C S/C S/C S/C S/C D/C	250 0 0 0 0 0 469 482 450 467 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0 6.0 5.1 10.1	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3
33 34 35 36 37 38 39 40 41 42 43 44 45	Export of HVDC 765 kV	WR (With NR) CHAMPA-KURUKSHETRA 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	250 0 0 0 0 0 469 482 450 467 0 22	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0 6.0 5.1 10.1 0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9
33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC 765 kV	WR (With NR) CHAMPA-KURUKSHETRA 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 0 0 0 469 482 450 467 0 22 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0 6.0 5.1 10.1 0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 0.0 3 0.9 1.5	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Export of HVDC 765 kV 400 kV	WR (With NR) CHAMPA-KURUKSHETRA 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 0 0 0 469 482 450 467 0 22 0 16	213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0 6.0 5.1 10.1 0 0.0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4
33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC 765 kV 400 kV	WR (With NR) CHAMPA-KURUKSHETRA 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C	250 0 0 0 0 0 469 482 450 467 0 22 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119	0.0 0.0 4.1 0.0 0.0 0.0 0.0 9.8 0.0 6.0 5.1 10.1 0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 0.0 3 0.9 1.5	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	Export of HVDC 765 kV - 400 kV - 220 kV	WR (With NR) CHAMPA-KURUKSHETRA 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	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	250 0 0 0 0 0 469 482 450 467 0 22 0 16	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41 61	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	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 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 0 0 0 469 482 450 467 0 22 0 16	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41 61 0 WR-NR	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51	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 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 0 0 0 469 482 450 467 0 22 0 16 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41 61 0 WR-NR	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52	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 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	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	250 0 0 0 0 0 469 482 450 467 0 222 0 16 0 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41 61 0 WR-NR	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52 53	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 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 S/C D/C S/C S/C D/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	250 0 0 0 0 0 469 482 450 467 0 222 0 16 0 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41 61 0 WR-NR 200 0 284 1204	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7 4.8 0.0 0.0 12.2	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6 -4.8 0.0 13.2 -12.2
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52	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 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	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	250 0 0 0 0 0 469 482 450 467 0 222 0 16 0 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 426 107 119 41 61 0 WR-NR	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52 53 54	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 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 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	250 0 0 0 0 0 469 482 450 467 0 22 0 16 0 0 0 1578 0 743	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 0 426 107 119 41 61 0 WR-NR 200 0 284 1204 0	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7 4.8 0.0 0.0 12.2 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6 -4.8 0.0 13.2 -12.2 14.0
Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/I 50 51 52 53 54 55	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 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 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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	250 0 0 0 0 0 469 482 450 467 0 222 0 16 0 0 0 1578 0 743 0	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 0 426 107 119 41 61 0 WR-NR 200 0 284 1204 0 0 0 0	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7 4.8 0.0 0.0 12.2 0.0 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6 -4.8 0.0 13.2 -12.2 14.0 0.0
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52 53 54 55 56	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 JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 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	250 0 0 0 0 469 482 450 467 0 22 0 16 0 0 1578 0 743 0 109	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 0 426 107 119 41 61 0 WR-NR 200 0 284 1204 0 0 0 0 WR-SR	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7 4.8 0.0 0.0 12.2 0.0 0.0 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6 -4.8 0.0 13.2 -12.2 14.0 0.0 0.0
Import/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52 53 54 55 56 57	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 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 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	250 0 0 0 0 469 482 450 467 0 22 0 16 0 0 1578 0 743 0 109	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 0 426 107 119 41 61 0 WR-NR 200 0 284 1204 0 0 0 0	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7 4.8 0.0 0.0 12.2 0.0 0.0 0.0 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6 -4.8 0.0 13.2 -12.2 14.0 0.0 0.0 2.1 12.3
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51 52 53 54 55 56	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 JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 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	250 0 0 0 0 469 482 450 467 0 22 0 16 0 0 1578 0 743 0 109	NER-NR 213 250 1814 2562 1636 1257 1948 0 0 0 0 426 107 119 41 61 0 WR-NR 200 0 284 1204 0 0 0 0 WR-SR	0.0 0.0 4.1 0.0 0.0 0.0 0.0 0.0	12.0 32.8 1.8 38.0 47.3 29.9 23.8 0.0 41.1 0.0 0.0 3 0.9 1.5 0.4 1.0 0.0 221.7 4.8 0.0 0.0 12.2 0.0 0.0 0.0 0.0	-12.0 -32.8 2.3 -38.0 -47.3 -29.9 -23.8 9.8 -41.1 6.0 5.1 10.1 -3 -0.9 -1.5 -0.4 -1.0 0.0 -186.6 -4.8 0.0 13.2 -12.2 14.0 0.0 0.0 2.1