

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)
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बी-9, क़ुतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 23rd Nov 2018

To,

- कार्यकारी निदेशक, पू.क्षे.भा .प्रे.के.,14 , गोल्फ क्लब रोड , कोलकाता 700033
 Executive Director, ERLDC, 14 Golf Club Road, Tolleygunge, Kolkata, 700033
- 2. कार्यकारी निदेशक, ऊ. क्षे. भा. प्रे. के., 18/ ए , शहीद जीत सिंह सनसनवाल मार्ग, नई दिल्ली 110016 Executive Director, 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. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के.,29 , रेस कोर्स क्रॉस रोड, बंगलुरु -560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 22.11.2018.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 22-नवंबर-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 22nd November 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 23-Nov-18

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	42900	49932	39419	18315	2449	153015
Peak Shortage (MW)	510	0	0	150	45	705
Energy Met (MU)	904	1185	872	348	42	3351
Hydro Gen (MU)	126	23	55	37	8	249
Wind Gen (MU)	5	41	59			105
Solar Gen (MU)*	21.05	18.44	49.62	0.83	0.04	90
Energy Shortage (MU)	10.5	0.0	0.0	0.5	0.6	11.5
Maximum Demand Met during the day	43701	55772	40012	19095	2616	155900
(MW) & time (from NLDC SCADA)	18:46	10:42	18:26	18:16	19:18	18:24

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	0.033	0.00	0.00	2.62	2.62	78.29	19.10

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	5443	0	114.3	28.5	0.1	103	0.0
	Haryana	6093	0	118.7	70.3	1.0	245	0.0
	Rajasthan	11535	0	230.1	66.8	3.3	474	0.0
	Delhi	3230	0	62.1	45.6	0.2	195	0.0
NR	UP	13074	0	267.2	113.7	0.4	286	0.0
	Uttarakhand	1876	0	35.8	22.7	1.5	172	0.2
	HP	1544	0	28.0	19.0	0.2	76	0.0
	J&K	2173	543	44.8	36.6	0.4	169	10.3
	Chandigarh	179	0	3.2	3.0	0.2	32	0.0
	Chhattisgarh	3532	0	77.8	8.3	0.4	335	0.0
	Gujarat	15291	0	338.7	131.5	2.1	565	0.0
	MP	13475	0	271.5	155.0	-1.9	579	0.0
WR	Maharashtra	21703	0	450.5	121.0	-2.6	794	0.0
WK	Goa	480	0	10.4	10.1	0.0	85	0.0
	DD	318	0	7.1	6.5	0.6	82	0.0
	DNH	684	0	15.1	14.9	0.3	109	0.0
	Essar steel	672	0	13.5	13.2	0.2	292	0.0
	Andhra Pradesh	7553	0	165.8	52.7	1.8	648	0.0
	Telangana	8133	0	177.7	83.3	2.0	478	0.0
SR	Karnataka	9599	0	194.8	61.6	1.0	468	0.0
3N	Kerala	3586	0	71.7	54.7	1.8	386	0.0
	Tamil Nadu	12776	0	256.0	136.3	0.7	567	0.0
	Pondy	323	0	6.4	6.7	-0.3	16	0.0
	Bihar	4033	0	71.5	68.7	0.2	460	0.0
	DVC	2982	0	63.1	-29.2	2.1	396	0.0
ER	Jharkhand	1127	0	24.1	14.8	-1.4	169	0.0
EN	Odisha	4457	150	83.2	36.2	4.1	267	0.5
	West Bengal	6414	0	104.8	26.2	1.8	309	0.0
	Sikkim	100	0	1.4	2.0	-0.6	18	0.0
	Arunachal Pradesh	128	4	2.0	2.0	0.0	13	0.0
	Assam	1450	28	23.1	18.8	0.2	140	0.4
	Manipur	156	4	2.3	2.6	-0.4	14	0.0
NER	Meghalaya	352	2	6.1	4.3	0.0	46	0.0
	Mizoram	94	4	1.8	0.6	0.6	7	0.0
	Nagaland	131	3	2.2	1.7	0.3	24	0.0
	Tripura	220	1	4.1	1.4	0.7	37	0.1

$\textbf{D. Transnational Exchanges} \ \ (\textbf{MU}) \textbf{-} \textbf{Import} (+\textbf{ve}) / \textbf{Export} (-\textbf{ve})$

	Bhutan	Nepal	Bangladesh
Actual(MU)	6.1	-2.8	13.1
Day peak (MW)	300.3	-148.0	598.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	144.8	-168.0	110.8	-86.4	-0.5	0.6
Actual(MU)	144.6	-187.8	116.7	-76.9	-1.1	-4.4
O/D/U/D(MU)	-0.2	-19.8	6.0	9.5	-0.5	-5.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4593	13155	7542	600	131	26021
State Sector	12395	13414	9440	6425	50	41724
Total	16988	26569	16982	7025	181	67744

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Thermal (Coal & Lignite)	535	1223	506	428	9	2701
Hydro	126	23	55	37	8	249
Nuclear	25	18	36	0	0	79
Gas, Naptha & Diesel	29	41	23	0	29	122
RES (Wind, Solar, Biomass & Others)	57	61	145	1	0	265
Total	772	1366	765	466	46	3415
Share of RES in total generation (%)	7.40	4.49	18.99	0.19	0.09	7.75
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	26.90	7.48	30.90	8.19	16.83	17.34

	H.	Diversity	Factor
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All I	ndia De	mand I	Diver	sity	Fac	tor		1.034	

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

^{*}Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

		INTE	R-REGI	ONAL EXC	CHANGES	Date of l	Reporting :	: 23-Nov-18
								Import=(+ve) /Export =(-ve) for NET (MU)
Sl No	Voltage	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export	NET
Import/E	Level Export of 1	ER (With NR)					(MU)	(MU)
1		GAYA-VARANASI	D/C	0	394	0.0	5.0	-5.0
3	765kV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	94	144 216	0.5	3.2	-0.3 -3.2
4	HVDC	ALIPURDUAR-AGRA	-	0	300	0.0	5.7	-5.7
5	nvbc	PUSAULI B/B	S/C	2	348	0.0	6.7	-6.7
6 7	_	PUSAULI-VARANASI PUSAULI -ALLAHABAD	S/C S/C	0	224 180	0.0	2.6	-4.1 -2.6
8		MUZAFFARPUR-GORAKHPUR	D/C	153	267	0.5	1.4	-0.9
9	400 kV	PATNA-BALIA	Q/C	0	649	0.0	13.9	-13.9
10		BIHARSHARIFF-BALIA	D/C	16	69	0.0	1.0	-1.0
11		MOTIHARI-GORAKHPUR	D/C	0	375	0.0	7.2	-7.2
12	220 kV	BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI	D/C S/C	148 0	65 161	0.8	2.0	-2.0
14	220 KV	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	25	0	0.6	0.0	0.6
16	132 KV	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
Import/E	Export of 1	ER (With WR)			ER-NR	2.4	53.5	-51.0
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	1460	0	22.8	0.0	22.8
19	1	NEW RANCHI-DHARAMJAIGARH	D/C	272	353	1.4	2.0	-0.6
20	400 kV	JHARSUGUDA-RAIGARH RANCHI-SIPAT	Q/C D/C	329 204	0	4.1 2.9	0.0	4.1 2.9
22		BUDHIPADAR-RAIGARH	S/C	0	80	0.0	1.2	-1.2
23	220 kV	BUDHIPADAR-KORBA	D/C	213	0	3.9	0.0	3.9
			1	·	ER-WR	35.2	3.1	32.0
	· -	ER (With SR)	D/G	1 00	17/2 0	0.0	21.5	21.5
24	765 kV HVDC	ANGUL-SRIKAKULAM JEYPORE-GAZUWAKA B/B	D/C D/C	0.0	1763.0 590.0	0.0	31.5 14.6	-31.5 -14.6
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1980.0	0.0	47.7	-47.7
27	400 kV	TALCHER-I/C	D/C	0.0	685.0	0.0	3.1	-3.1
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
Import/E	Export of	ER (With NER)			ER-SR	0.0	93.8	-93.8
29	1	BINAGURI-BONGAIGAON	D/C	0	508	0.0	7.5	-8
30	400 kV	ALIPURDUAR-BONGAIGAON	D/C	0	364	0.0	5.4	-5
31	220 kV	ALIPURDUAR-SALAKATI	D/C	0	125	0.0	2.1	-2
Import/F	Export of I	NER (With NR)			ER-NER	0.0	15.0	-15.0
32		BISWANATH CHARIALI-AGRA	-	0	733	0.0	14.9	-14.9
					NER-NR	0.0	14.9	-14.9
Import/E	Export of '	WR (With NR) CHAMPA-KURUKSHETRA	D/C	0	903	0.0	21.5	-21.5
34	HVDC	V'CHAL B/B	D/C	241	0	6.0	0.0	6.0
35		APL -MHG	D/C	0		0.0	19.4	-19.4
36		GWALIOR-AGRA			790	0.0	17.7	
37		GWALIOK-AGKA	D/C	0	874	0.0	31.8	-31.8
	╡	PHAGI-GWALIOR	D/C	0	874 1179	0.0	31.8 21.4	-21.4
38	765 kV	PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C	0	874 1179 424	0.0 0.0 0.0	31.8 21.4 7.2	-21.4 -7.2
	765 kV	PHAGI-GWALIOR	D/C	0	874 1179 424 0	0.0 0.0 0.0 9.3	31.8 21.4 7.2 0.0	-21.4 -7.2 9.3
38 39	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C S/C	0 0 497	874 1179 424	0.0 0.0 0.0	31.8 21.4 7.2	-21.4 -7.2
38 39 40 41 42	-	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C S/C S/C S/C S/C	0 0 497 0 302 158	874 1179 424 0 1690	0.0 0.0 0.0 9.3 0.0 5.5 1.3	31.8 21.4 7.2 0.0 38.1	-21.4 -7.2 9.3 -38.1 5.5 1.3
38 39 40 41 42 43	765 kV - 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C S/C S/C S/C S/C S/C	0 0 497 0 302 158 980	874 1179 424 0 1690 0 131	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4	31.8 21.4 7.2 0.0 38.1 0.0 0.0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4
38 39 40 41 42 43 44	-	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C D/C S/C S/C S/C S/C S/C D/C	0 0 497 0 302 158 980 298	874 1179 424 0 1690 0 131 0	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4
38 39 40 41 42 43 44 45	- 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 497 0 302 158 980 298 64	874 1179 424 0 1690 0 131 0 0	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2
38 39 40 41 42 43 44	-	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR	D/C D/C S/C S/C S/C S/C S/C D/C	0 0 497 0 302 158 980 298	874 1179 424 0 1690 0 131 0	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4
38 39 40 41 42 43 44 45 46 47 48	- 400 kV	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	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 497 0 302 158 980 298 64 58	874 1179 424 0 1690 0 131 0 1 26 0 2	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6
38 39 40 41 42 43 44 45 46 47	- 400 kV	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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 497 0 302 158 980 298 64 58	874 1179 424 0 1690 0 131 0 1 26 0 2	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0
38 39 40 41 42 43 44 45 46 47 48 49	400 kV 220 kV	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	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 497 0 302 158 980 298 64 58 107	874 1179 424 0 1690 0 131 0 1 26 0 2	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6
38 39 40 41 42 43 44 45 46 47 48 49	220 kV 132kV Export of V	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 497 0 302 158 980 298 64 58 107	874 1179 424 0 1690 0 131 0 1 26 0 2	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50	400 kV 220 kV 132kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 1 1 26 0 2 0 WR-NR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52	220 kV 132kV Export of V	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RHAND 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 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 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 131 0 0 WR-NR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53	220 kV 132kV Export of V HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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 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	0 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 1 26 0 2 0 WR-NR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3 -36.4
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52	220 kV 132kV Export of V HVDC LINK	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RHAND 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 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 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 131 0 0 WR-NR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54	220 kV 132kV Export of V HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI 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-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI	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 D/C S/C D/C D/C D/C D/C D/C D/C D/C D/C D/C D	0 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 1 26 0 2 0 WR-NR 995 0 1820 2219	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3 -36.4 10.7
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55	400 kV 220 kV 132kV Export of V HVDC LINK 765 kV 400 kV	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 KOLHAPUR-CHIKODI	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 S/C D/C D/C D/C D/C D/C D/C D/C	0 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 1 26 0 2 0 WR-NR 995 0 1820 2219 0 0 68	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3 -36.4 10.7 0.0
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56	400 kV 220 kV 132kV Export of V HVDC LINK 765 kV 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR 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 S/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 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 1 1 26 0 2 0 WR-NR 995 0 1820 2219 0 0 0 WR-SR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2.1 0.4 1.5 0.6 0.0 51.2	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3 -36.4 10.7 0.0 0.0
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56 57	400 kV 220 kV 132kV Export of V HVDC LINK 765 kV 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR 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 S/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 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 1 1 26 0 2 0 WR-NR 995 0 1820 2219 0 0 0 WR-SR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.3	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3 -36.4 10.7 0.0 0.0 1.3 -69.4
38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56	400 kV 220 kV 132kV Export of V HVDC LINK 765 kV 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR 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 S/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 0 497 0 302 158 980 298 64 58 107 60 0	874 1179 424 0 1690 0 131 0 0 1 1 26 0 2 0 WR-NR 995 0 1820 2219 0 0 0 WR-SR	0.0 0.0 0.0 9.3 0.0 5.5 1.3 22.4 2 2.1 0.4 1.5 0.6 0.0 51.2 0.0 0.0 0.0 0.0 10.7 0.0 0.0 1.3	31.8 21.4 7.2 0.0 38.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-21.4 -7.2 9.3 -38.1 5.5 1.3 22.4 2 2.1 0.3 1.5 0.6 0.0 -88.2 -20.7 0.0 -24.3 -36.4 10.7 0.0 0.0 1.3