

National Load Despatch Centre राष्ट्रीय भार प्रेषण केंद्र

POWER SYSTEM OPERATION CORPORATION LIMITED पाँवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(Government of India Enterprise/ भारत सरकार का उद्यम) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016 बी-9, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 04thSep 2019

To,

- 1. कार्यकारी निदेशक, पू.क्षे.भा.प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ Executive Director, ERLDC, 14 Golf Club Road, Tollygunge, 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. मुख्य महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह, लापलंग, शिलोंग ७९३००६ Chief General Manager, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 5. कार्यकारी निदेशक , द .क्षे .भा .प्रे .के., २९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 03.09.2019.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 03-सितंबर-2019 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 3rdSep 2019, is available at the NLDC website.

धन्यवाद,

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

Date of Reporting Report for previous day 4-Sep-19

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	58288	44404	38122	22113	2887	165814
Peak Shortage (MW)	2292	0	0	0	176	2468
Energy Met (MU)	1357	1008	856	476	55	3751
Hydro Gen (MU)	360	103	103	134	16	717
Wind Gen (MU)	3	57	159			219
Solar Gen (MU)*	22.71	16.32	51.84	1.89	0.03	93
Energy Shortage (MU)	17.0	0.0	0.0	0.0	1.3	18.3
Maximum Demand Met during the day	61686	45900	38055	22416	2965	167494
(MW) & time (from NLDC SCADA)	22:50	19:30	19:28	19:44	18:46	19:28

B. Frequency Profile (%)
Region
All India FVI <49.7 49.7-49.8 49.8-49.9 <49.9 49.9-50.05 > 50.05 0.033

C	Down	Cumple	Docition	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	10967	0	242.9	138.0	-1.3	29	0.0
	Haryana	9845	0	215.7	165.6	0.2	248	0.0
NR	Rajasthan	9651	0	212.6	74.7	-2.6	222	0.0
	Delhi	6323	0	129.2	99.9	-0.2	348	0.0
NR	UP	21176	0	434.0	218.1	2.6	892	7.2
	Uttarakhand	1982	0	43.9	16.3	0.6	261	0.0
	HP	1412	0	30.7	-3.0	3.0	232	0.0
	J&K	2087	522	41.2	18.7	-0.6	145	9.8
	Chandigarh	331	0	6.5	7.1	-0.6	50	0.0
	Chhattisgarh	3727	0	89.7	30.9	0.1	305	0.0
	Gujarat	13228	0	297.9	85.1	5.1	563	0.0
	MP	8430	0	185.2	82.8	-3.3	382	0.0
MD	Maharashtra	18190	0	395.5	127.6	-0.4	533	0.0
WR	Goa	541	0	8.8	8.6	-0.3	43	0.0
	DD	325	0	6.4	6.2	0.2	32	0.0
	DNH	790	0	18.3	18.4	-0.1	40	0.0
	Essar steel	344	0	5.9	5.5	0.4	301	0.0
	Andhra Pradesh	7005	0	153.6	26.1	-0.1	699	0.0
	Telangana	8303	0	168.5	66.5	-0.2	752	0.0
SR	Karnataka	9540	0	174.9	15.1	-5.6	570	0.0
3K	Kerala	3345	0	65.9	46.5	1.4	191	0.0
	Tamil Nadu	13287	0	286.3	114.6	-0.4	534	0.0
	Pondy	387	0	7.1	7.8	-0.6	40	0.0
	Bihar	5972	0	117.0	114.1	-1.3	208	0.0
	DVC	2912	0	62.8	-31.3	-0.7	195	0.0
ER	Jharkhand	1286	0	25.4	17.2	-1.1	110	0.0
LIV	Odisha	4439	0	91.1	22.7	6.9	620	0.0
	West Bengal	8331	0	178.4	78.4	2.3	590	0.0
	Sikkim	85	0	0.9	1.2	-0.4	20	0.0
	Arunachal Pradesh	128	2	2.4	2.5	-0.2	28	0.0
	Assam	1894	92	36.1	30.4	1.1	153	1.2
	Manipur	170	2	2.5	2.4	0.1	16	0.0
NER	Meghalaya	298	0	4.9	2.7	-0.1	162	0.0
	Mizoram	96	1	1.7	0.6	0.1	70	0.0
	Nagaland	129	3	2.4	2.4	-0.3	51	0.0
	Tripura	280	18	5.0	4.9	0.2	133	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	41.9	-5.7	-25.9
Day peak (MW)	1885.4	-415.9	-1118.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	304.9	-268.4	10.7	-61.3	14.2	0.0
Actual(MU)	314.3	-257.4	-15.7	-51.9	15.2	4.5
O/D/U/D(MU)	9.4	11.0	-26.3	9.4	1.0	4.5

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4240	15440	8182	850	639	29351
State Sector	8385	21064	9370	6240	50	45109
Total	12625	36504	17552	7090	688	74459

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	573	1013	408	421	7	2422
Lignite	16	5	38	0	0	59
Hydro	360	103	103	134	16	717
Nuclear	27	31	55	0	0	113
Gas, Naptha & Diesel	39	47	17	0	22	125
RES (Wind, Solar, Biomass & Others)	42	78	254	2	0	375
Total	1057	1277	876	556	46	3812

Share of RES in total generation (%)	3.94	6.07	29.01	0.34	0.07	9.84
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	40.58	16.57	47.14	24.39	35.77	31.62

H. Diversity Factor All India Demand Diversity Factor

All India Demand Diversity Factor 1.021
Diversity factor = Sum of regional maximum demands / All India maximum demand

 $[\]textbf{*\underline{Source}:} \ RLDCs \ for \ solar \ connected \ to \ ISTS; \ SLDCs \ for \ embedded \ solar. \ Limited \ visibility \ of \ embedded \ solar \ data.$

		IN	TER-REGI	ONAL EXCHA	ANGES	Date of I	Reporting :	4-Sep-19
								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)
•	xport of	ER (With NR)			1	1		
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	78 230	416 45	0.0 2.2	3.9 0.0	-3.9 2.2
3	705K	GAYA-BALIA	S/C	0	462	0.0	8.9	-8.9
4	HVDC	ALIPURDUAR-AGRA	-	0	901	0.0	21.9	-21.9
5	пове	PUSAULI B/B	S/C	0	198	0.0	4.7	-4.7
6		PUSAULI-VARANASI	S/C	0	200	0.0	4.0	-4.0
7		PUSAULI -ALLAHABAD	S/C D/C	0	55 787	0.0	0.6	-0.6 -11.3
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	O/C	0	909	0.0	17.0	-11.3
10	10011	BIHARSHARIFF-BALIA	D/C	0	399	0.0	8.0	-8.0
11		MOTIHARI-GORAKHPUR	D/C	0	0	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	157	89	0.7	0.0	0.7
13	220 kV	PUSAULI-SAHUPURI	S/C	0	196	0.0	3.8	-3.8
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.4	0.0	0.4
16		KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	() ED ND	0.0	0.0	0.0
Import/F	vnert of	FR (With WP)			ER-NR	3.2	84.1	-80.9
-	лрогі оі	ER (With WR)	1 1		1	1		1
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	958	0	16.2	0.0	16.2
19	705 KV	NEW RANCHI-DHARAMJAIGARH	D/C	1213	0	22.5	0.0	22.5
20		JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	253 279	0	4.3 3.6	0.0	4.3 3.6
22	400 kV	RANCHI-SIPAT	D/C	409	0	7.4	0.0	7.4
23		BUDHIPADAR-RAIGARH	S/C	0	112	0.0	1.8	-1.8
24	220 kV	BUDHIPADAR-KORBA	D/C	144	0	2.3	0.0	2.3
			•		ER-WR	56.3	1.8	54.5
Import/E	xport of	ER (With SR)						
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1528.0	0.0	21.9	-21.9
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	316.0	0.0	7.3	0.0	7.3
27	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	488.0	0.0	12.1	-12.1
28	400 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	711.0	0.0	13.8 0.0	0.0	13.8 0.0
29	220 kV	BALIWELA-UFFER-SILERRU	3/C	1.0	ER-SR	7.3	0.0 34.0	-26.7
Import/E	export of	ER (With NER)				7.0		2017
30	400 1 77	BINAGURI-BONGAIGAON	D/C	0	791	0.0	13.4	-13
31	400 kV	ALIPURDUAR-BONGAIGAON	D/C	0	656	0.0	10.8	-11
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	182	0.0	3.2	-3
	-				ER-NER	0.0	27.3	-27.3
_	· -	NER (With NR)	1					
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	703	0.0	14.7	-14.7
Import/F	vnort of	WR (With NR)			NER-NR	0.0	14.7	-14.7
34	Aport or	CHAMPA-KURUKSHETRA	D/C	0	3012	0.0	61.2	-61.2
35	HVDC	V'CHAL B/B	D/C	0	489	0.0	6.3	-6.3
36	1	APL -MHG	D/C	0			0.0	
37			D/C	U	1922	0.0	26.6	-26.6
	4	GWALIOR-AGRA	D/C	0				
38		GWALIOR-AGRA PHAGI-GWALIOR			1922	0.0	26.6	-26.6
	765 EV		D/C	0 0 0	1922 2720	0.0 0.0 0.0 0.0	26.6 52.7	-26.6 -52.7 -18.3 -35.0
38 39 40	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C D/C S/C	0 0 0 397	1922 2720 1138 938 0	0.0 0.0 0.0 0.0 7.5	26.6 52.7 18.3 35.0 0.0	-26.6 -52.7 -18.3 -35.0 7.5
38 39 40 41	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C D/C S/C S/C	0 0 0 397 0	1922 2720 1138 938 0 1415	0.0 0.0 0.0 0.0 7.5 0.0	26.6 52.7 18.3 35.0 0.0 30.3	-26.6 -52.7 -18.3 -35.0 7.5 -30.3
38 39 40 41 42	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	D/C D/C D/C S/C S/C D/C	0 0 0 397 0	1922 2720 1138 938 0 1415	0.0 0.0 0.0 0.0 7.5 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8
38 39 40 41 42 43	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 0 0 397 0 0 21	1922 2720 1138 938 0 1415 978	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3
38 39 40 41 42 43 44	765 kV - 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	D/C D/C D/C S/C S/C S/C S/C S/C S/C	0 0 0 397 0 0 21	1922 2720 1138 938 0 1415 978 155 251	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3 -3.0
38 39 40 41 42 43 44 45		PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	0 0 0 397 0 0 21 0	1922 2720 1138 938 0 1415 978 155 251 0	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 2.4	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3 -3.0 22.4
38 39 40 41 42 43 44 45 46		PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL V'CHAL - RIHAND RAPP-SHUJALPUR	D/C D/C D/C S/C S/C S/C S/C D/C S/C S/C D/C S/C S/C D/C	0 0 0 397 0 0 21	1922 2720 1138 938 0 1415 978 155 251 0	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 22.4	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3 -3.0 22.4 -3
38 39 40 41 42 43 44 45	400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND	D/C D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C	0 0 0 397 0 0 21 0 967	1922 2720 1138 938 0 1415 978 155 251 0	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 2.4	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3 -3.0 22.4
38 39 40 41 42 43 44 45 46 47		PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATIA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	D/C D/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 0 397 0 0 21 0 967 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 22.4 0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3 -3.0 22.4 -3 -0.3
38 39 40 41 42 43 44 45 46 47 48	400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK	D/C D/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 0 397 0 0 21 0 967 0 24	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 22.4 0 0.1	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 1.3	-26.6 -52.7 -18.3 -35.0 -7.5 -30.3 -3.0 -1.3 -3.0 -22.4 -3 -0.3 -1.3
38 39 40 41 42 43 44 45 46 47 48 49	400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA	D/C D/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 0 397 0 0 21 0 967 0 24 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 1.3 0.1	-26.6 -52.7 -18.3 -35.0 -7.5 -30.3 -3.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -1.3 -0.1
38 39 40 41 42 43 44 45 46 47 48 49 50	- 400 kV - 220 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR	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 0 397 0 0 21 0 967 0 24 0 54	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 1.3 0.1 0.8	-26.6 -52.7 -18.3 -35.0 -7.5 -30.3 -3.0 -3.0 -3.0 -22.4 -3 -0.3 -1.3 -0.1 -0.8
38 39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV 220 kV 132kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-JURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	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 0 397 0 0 21 0 967 0 24 0 54	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.3 1.3 0.1 0.8 0.0	-26.6 -52.7 -18.3 -35.0 -7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -0.1 -0.8 -0.0 -200.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51	400 kV 220 kV 132kV Export of HVDC	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	D/C D/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 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.2 0.0 0.1 0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 1.3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 22.4 -3 -0.3 -1.3 0.1 -0.8 0.0 -200.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53	400 kV 220 kV 132kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	D/C D/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	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 1.3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -0.1 -0.8 -200.9 -7.2 -0.0
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54	400 kV 220 kV 132kV Export of HVDC	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 7.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 0.2 0.0 0.0 0.0 30.1	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 1.3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 22.4 -3 -0.3 -1.3 0.1 -0.8 0.0 -200.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55	400 kV 220 kV 132kV Export of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 3.3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 8.8 -1.3 -3.0 22.4 -3 -0.3 -1.3 0.1 -0.8 0.0 -200.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	220 kV 132kV Export of HVDC LINK	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 0.3 0.3 0.3 0.0 0.0	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -1.3 -0.1 -0.8 -0.0 -200.9 7.2 -0.0 -8.7 -16.3 -16.3
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	220 kV 132kV 2xport of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMBAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	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 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.3 1.3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 -7.5 -30.3 -3.0 -3.0 -22.4 -3 -0.3 -1.3 -1.3 -0.1 -0.8 -0.0 -200.9 -7.2 -0.0 -8.7 -16.3 -16.7 -0.0
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	220 kV 132kV 2xport of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 -7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -1.3 -0.1 -0.8 -0.0 -200.9 -7.2 -0.0 -16.3 -16.3 -16.7 -0.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV 2xport of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMBAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	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 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR 0 0 617 1451 0 0 0 48	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -0.1 -0.8 -0.0 -200.9 7.2 -0.0 -8.7 -16.3 -16.7 -0.0 -0.9 -0.5
38 39 40 41 42 43 44 45 46 47 48 49 50 51 S2 53 54 55 56 57 58	220 kV 132kV 2xport of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 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 S/C S/C S/C S/C S/C S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -1.3 -0.1 -0.8 -0.0 -200.9 7.2 -0.0 -16.3 -16.3 -16.7 -0.0 -0.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58 59	220 kV 132kV 2xport of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-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 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 S/C S/C S/C S/C S/C S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -0.1 -0.8 -0.0 -200.9 7.2 -0.0 -8.7 -16.3 -16.3 -16.7 -0.0 -0.9 -0.5 -15.9
38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	220 kV 132kV 2xport of HVDC LINK 765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 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 S/C S/C S/C S/C S/C S/C S	0 0 0 397 0 0 21 0 967 0 24 0 54 14 0	1922 2720 1138 938 0 1415 978 155 251 0 379 38 95 25 57 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	26.6 52.7 18.3 35.0 0.0 30.3 8.8 1.3 3.0 0.0 3 3 0.1 0.8 0.0 248.5	-26.6 -52.7 -18.3 -35.0 7.5 -30.3 -8.8 -1.3 -3.0 -22.4 -3 -0.3 -1.3 -0.1 -0.8 -0.0 -200.9 7.2 -0.0 -8.7 -16.3 -16.7 -0.0 -0.9 -0.5