

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, कृतुब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 07thSep 2019

To,

- कार्यकारी निदेशक, पू .क्षे .भा .प्रे .के.,14 , गोल्फ क्लब रोड , कोलकाता 700033
 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 793006 Chief General Manager, 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 06.09.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 06-सितंबर-2019 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 06^{th} Sep 2019, 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 7-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)	58936	44234	40437	22336	2884	168827
Peak Shortage (MW)	2466	0	0	0	160	2626
Energy Met (MU)	1340	1015	918	466	55	3793
Hydro Gen (MU)	375	112	154	130	20	791
Wind Gen (MU)	8	63	205			276
Solar Gen (MU)*	28.72	15.11	56.81	1.95	0.04	103
Energy Shortage (MU)	20.2	0.0	0.0	0.0	2.5	22.7
Maximum Demand Met during the day	60656	45933	40850	23326	2974	171559
(MW) & time (from NLDC SCADA)	22:19	19:01	09:48	20:34	18:43	19:32

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	10021	0	219.2	135.5	-1.0	56	0.0
	Haryana	9642	0	209.3	155.2	-0.8	158	0.0
	Rajasthan	10211	0	228.7	74.4	0.8	476	0.0
NR	Delhi	6134	0	128.5	106.7	-0.4	147	0.0
NR	UP	21403	0	435.0	230.2	1.9	578	10.7
	Uttarakhand	1950	0	42.7	15.7	-0.1	114	0.0
	HP	1452	0	30.8	0.0	-0.2	68	0.0
	J&K	2062	516	39.8	19.4	-2.6	162	9.5
	Chandigarh	301	0	5.9	6.7	-0.8	2	0.0
	Chhattisgarh	3760	0	86.8	36.4	-0.3	225	0.0
	Gujarat	13257	0	292.4	95.4	3.3	473	0.0
	MP	8849	0	195.1	89.5	-4.2	501	0.0
WR	Maharashtra	18467	0	397.8	124.3	-1.4	444	0.0
WIN	Goa	541	0	10.2	9.5	0.2	46	0.0
	DD	336	0	7.5	6.9	0.6	48	0.0
	DNH	784	0	18.6	18.7	-0.1	34	0.0
	Essar steel	338	0	6.7	6.7	-0.1	298	0.0
	Andhra Pradesh	7465	0	167.9	29.9	-0.9	329	0.0
	Telangana	9402	0	193.7	55.8	-2.5	478	0.0
SR	Karnataka	9781	0	179.2	14.3	-2.0	605	0.0
311	Kerala	3405	0	65.5	42.5	0.4	185	0.0
	Tamil Nadu	14258	0	303.7	121.0	-4.4	814	0.0
	Pondy	380	0	7.9	8.3	-0.4	29	0.0
	Bihar	5774	0	116.8	111.3	0.9	600	0.0
	DVC	2836	0	60.9	-30.5	-0.1	200	0.0
ER	Jharkhand	1146	0	25.9	17.2	-0.6	50	0.0
-11	Odisha	4338	0	90.3	23.0	8.7	700	0.0
	West Bengal	9231	0	170.8	72.7	2.4	500	0.0
	Sikkim	94	0	0.9	1.3	-0.4	10	0.0
	Arunachal Pradesh	128	2	2.3	2.9	-0.6	3	0.0
	Assam	1899	134	35.2	29.7	0.7	156	2.4
	Manipur	182	1	2.5	2.5	0.0	36	0.0
NER	Meghalaya	297	0	5.3	2.1	-0.2	28	0.0
	Mizoram	89	1	1.9	0.5	0.9	5	0.0
	Nagaland	145	2	2.3	2.3	-0.3	38	0.0
	Tripura	288	3	5.2	4.0	0.3	79	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	42.1	-5.7	-25.7
Day peak (MW)	2031.8	-374.0	-1099.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	313.4	-233.2	-1.3	-85.3	10.4	4.1
Actual(MU)	317.9	-239.1	-19.1	-73.7	12.8	-1.2
O/D/U/D(MU)	4.5	-5.9	-17.9	11.6	2.4	-5.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4226	16300	8432	850	736	30544
State Sector	9030	20277	11090	6530	50	46976
Total	13256	36576	19522	7380	786	77520

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	534	973	370	437	7	2322
Lignite	21	10	44	0	0	76
Hydro	375	112	154	130	20	791
Nuclear	27	31	55	0	0	114
Gas, Naptha & Diesel	39	52	16	0	20	128
RES (Wind, Solar, Biomass & Others)	53	84	309	2	0	448
Total	1049	1263	949	569	47	3878

Share of RES in total generation (%)	5.03	6.64	32.56	0.35	0.08	11.55
Share of Non-fossil fuel (Hydro, Nuclear and	12 22	18.01	54.64	22.22	41.54	34.88
RES) in total generation (%)	43.33	10.01	34.04	23.22	41.54	34.00

H. Diversity Factor
All India Demand Diversity Factor 1.013

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.

JI.		IN	ER-REGI	ONAL EXCHA	ANGES	Date of I	Reporting :	7-Sep-19
<u> </u>								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)						
1	765kV	GAYA-VARANASI	D/C	0 162	477	0.0	8.1 0.0	-8.1
3	/05KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	177 474	1.5 0.0	8.8	1.5 -8.8
4	HVDC	ALIPURDUAR-AGRA	-	0	902	0.0	21.8	-21.8
5	HVDC	PUSAULI B/B	S/C	0	195	0.0	4.8	-4.8
6		PUSAULI-VARANASI	S/C	0	167	0.0	3.4	-3.4
7		PUSAULI -ALLAHABAD	S/C	0	93	0.0	1.3	-1.3
9	400 kV	MUZAFFARPUR-GORAKHPUR PATNA-BALIA	D/C O/C	0	732 1041	0.0	12.1	-12.1 -19.8
10	400 K	BIHARSHARIFF-BALIA	D/C	0	330	0.0	5.5	-5.5
11	1	MOTIHARI-GORAKHPUR	D/C	0	12	0.0	0.0	0.0
12		BIHARSHARIFF-VARANASI	D/C	76	136	0.0	0.3	-0.3
13	220 kV	PUSAULI-SAHUPURI	S/C	0	193	0.0	3.6	-3.6
14		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.5	0.0	0.5
16	4	KARMANASA-SAHUPURI	S/C	0	0	0.0	0.0	0.0
17	1	KARMANASA-CHANDAULI	S/C	0	0 ER-NR	0.0 1.9	0.0 89.5	0.0 -87.6
Import/I	Export of	ER (With WR)			ER-NK	1.9	07.3	-07.0
		T '	0/0	0.40	0	10.7	0.0	10.7
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	948	0	12.7	0.0	12.7
19 20		NEW RANCHI-DHARAMJAIGARH	D/C	1026	0	17.3	0.0	17.3
20	1	JHARSUGUDA-DURG JHARSUGUDA-RAIGARH	D/C Q/C	236 237	126	3.5 2.1	0.0	3.5 2.1
22	400 kV	RANCHI-SIPAT	D/C	337	0	4.2	0.0	4.2
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	122	0.0	2.0	-2.0
24	220 K V	BUDHIPADAR-KORBA	D/C	90	2	1.0	0.0	1.0
					ER-WR	40.8	2.0	38.8
		ER (With SR)						
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1597.0	0.0	22.2	-22.2
26 27	HVDC LINK	JEYPORE-GAZUWAKA B/B TALCHER-KOLAR BIPOLE	D/C D/C	317.0 0.0	0.0 588.0	7.3 0.0	0.0 14.5	7.3 -14.5
28	400 kV	TALCHER-I/C	D/C	483.0	0.0	10.2	0.0	10.2
29	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	7.3	36.7	-29.3
Import/F	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	665	0.0	12.3	-12
31		ALIPURDUAR-BONGAIGAON	D/C	0	500	0.0	7.7	-8
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	155 ER-NER	0.0	2.7	-3
Import/I	Export of	NER (With NR)			ER-NER	0.0	22.0	-22.6
			1 _ 1	0	503	0.0	12.2	-12.2
	1	BISWANATH CHARIALI-AGRA						
		BISWANATH CHARIALI-AGRA			NER-NR	0.0	12.2	-12.2
Import/I	Export of	BISWANATH CHARIALI-AGRA WR (With NR)						-12.2
Import/E			D/C	0	NER-NR 3005	0.0	12.2 57.4	-57.4
34 35	Export of HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B	D/C	0	3005 153	0.0 0.0 0.0	57.4 3.7	-57.4 -3.7
34 35 36		WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG	D/C D/C	0	NER-NR 3005 153 1458	0.0 0.0 0.0 0.0	57.4 3.7 32.0	-57.4 -3.7 -32.0
34 35 36 37		WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C	0 0 0	3005 153 1458 2547	0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0	-57.4 -3.7 -32.0 -49.0
34 35 36 37 38	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	0 0 0 0	3005 153 1458 2547 1147	0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4	-57.4 -3.7 -32.0 -49.0 -21.4
34 35 36 37 38 39		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	0 0 0 0	3005 153 1458 2547 1147 904	0.0 0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1
34 35 36 37 38	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C	0 0 0 0	3005 153 1458 2547 1147	0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4	-57.4 -3.7 -32.0 -49.0 -21.4
34 35 36 37 38 39 40	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 S/C	0 0 0 0 0 0 376	3005 153 1458 2547 1147 904 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 7.3	57.4 3.7 32.0 49.0 21.4 37.1 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3
34 35 36 37 38 39 40 41	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	0 0 0 0 0 0 376	NER-NR 3005 153 1458 2547 1147 904 0 1383	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 7.3 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9
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 JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL	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 0 0 0 0 376 0 0 0 58 58	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135	0.0 0.0 0.0 0.0 0.0 0.0 0.0 7.3 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -30.9 11.9 -0.7 -0.9
34 35 36 37 38 39 40 41 42 43 44 45	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	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 0 0 0 0 376 0 0 0 58 58	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 7.3 0.0 0.0 0.2 22.2	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2
34 35 36 37 38 39 40 41 42 43 44 45	HVDC - 765 kV	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA 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 D/C D/C D/C D/C S/C S/C S/C S/C S/C S/C D/C	0 0 0 0 0 376 0 0 58 58 962	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3
34 35 36 37 38 39 40 41 42 43 44 45 46 47	HVDC - 765 kV	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	D/C 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	0 0 0 0 0 376 0 0 58 58 962 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39	0.0 0.0 0.0 0.0 0.0 0.0 0.0 7.3 0.0 0.0 0.2 0.2 22.2 0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3
34 35 36 37 38 39 40 41 42 43 44 45 46 47	HVDC - 765 kV	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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 S/C S	0 0 0 0 0 376 0 0 58 58 962 0 24	NER-NR 3005 153 1458 2547 11147 904 0 1383 854 119 135 0 349 39 84	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	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 CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4
34 35 36 37 38 39 40 41 42 43 44 45 46 47	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 CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-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	0 0 0 0 0 376 0 0 58 58 962 0 24	NER-NR 3005 153 1458 2547 11147 904 0 1383 854 119 135 0 349 39 84	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	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 CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	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 CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5 0.0
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	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 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 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 0 0 376 0 0 58 58 962 0 24 4 64 20	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5 0.0
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	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 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)	D/C 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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 20 0	NER-NR 3005 153 1458 22547 11147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 49.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5 0.0 -195.7
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/F 52 53 54	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 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	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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 11147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5 0.0 -195.7
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/F 52 53 54 55	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 JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-WORAK 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 11147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.6 0.0 249.8 0.0 0.4	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5 0.0 -195.7
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/F 52 53 54 55 56	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 SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-WORAK 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 3 0.3 0.9 0.0 0.6 0.0 249.8 0.0 0.0 0.4	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 -11.9 -0.7 -0.9 -22.2 -3 -0.3 -0.9 -0.4 -0.5 -0.0 -195.7 -7.2 -0.0 -15.2 -16.9 -18.3
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/F 52 53 54 55 56 57	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA 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 BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C D/C 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 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	0 0 0 0 0 376 0 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR 0 0 442 1482 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.9 1.0 0.0 249.8 0.0 0.0 0.4 16.9 0.0 0.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 -11.9 -0.7 -0.9 -22.2 -3 -0.3 -0.9 -0.4 -0.5 -0.0 -195.7 -7.2 -0.0 -15.2 -16.9 -18.3 -0.0
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	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 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 BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C 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 D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 0 0 376 0 0 0 58 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR 0 0 442 1482 0 0 0 57	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.0 0.0 0.0 249.8 0.0 0.0 0.4 16.9 0.0 1.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 -11.9 -0.7 -0.9 -22.2 -3 -0.3 -0.9 -0.4 -0.5 -0.0 -195.7 7.2 -0.0 -15.2 -16.9 -18.3 -0.0 -1.0
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/F 52 53 54 55 56 57	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL-MHG GWALIOR-AGRA 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 BHADRAWATI B/B BHADRAWATI B/B BHADRAWATI B/B BARSUR-LSILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C D/C 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 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	0 0 0 0 0 376 0 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR 0 0 442 1482 0 0 0 57	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.0 0.0 0.6 0.0 249.8 0.0 0.0 0.0 1.6 0.0 0.0 1.0 0.0 0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 -11.9 -0.7 -0.9 -22.2 -3 -0.3 -0.9 -0.4 -0.5 -0.0 -195.7 7.2 -0.0 -15.2 -16.9 -18.3 -0.0 -1.0 -0.6
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 S1 S2 S3 S4 S5 S5 S6 S7 S8	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA 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-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C 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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR 0 0 442 1482 0 0 0 57 33 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.0 0.0 0.0 249.8 0.0 0.0 0.4 16.9 0.0 1.0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 -11.9 -0.7 -0.9 -22.2 -3 -0.3 -0.9 -0.4 -0.5 -0.0 -195.7 7.2 -0.0 -15.2 -16.9 -18.3 -0.0 -1.0
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 S1 S2 S3 S4 S5 S5 S6 S7 S8 S9	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATINA-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-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C 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	0 0 0 0 0 376 0 0 0 58 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR 0 0 442 1482 0 0 0 57 33 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.0 0.0 0.6 0.0 249.8 0.0 0.0 0.0 1.6 0.0 0.0 1.0 0.0 0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 11.9 -0.7 -0.9 22.2 -3 -0.3 -0.9 0.4 -0.5 0.0 -195.7 7.2 0.0 15.2 -16.9 18.3 0.0 -1.0 0.6 23.4
34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	HVDC	WR (With NR) CHAMPA-KURUKSHETRA V'CHAL B/B APL -MHG GWALIOR-AGRA 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-NIZAMABAD KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C D/C 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	0 0 0 0 0 376 0 0 58 58 962 0 24 4 64 20 0	NER-NR 3005 153 1458 2547 1147 904 0 1383 854 119 135 0 349 39 84 6 41 0 WR-NR 0 0 442 1482 0 0 0 57 33 WR-SR	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	12.2 57.4 3.7 32.0 49.0 21.4 37.1 0.0 30.9 11.9 0.0 0.0 0.6 0.0 249.8 0.0 0.0 0.0 1.6 0.0 0.0 1.0 0.0 0	-57.4 -3.7 -32.0 -49.0 -21.4 -37.1 -7.3 -30.9 -11.9 -0.7 -0.9 -22.2 -3 -0.3 -0.9 -0.4 -0.5 -0.0 -195.7 7.2 -0.0 -15.2 -16.9 -18.3 -0.0 -1.0 -0.6