

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: 10th Feb 2020

To,

- 1. 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. 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.,२९ , रेस कोर्स क्रॉस रोड, बंगलुरु –५६०००९ Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 09.02.2020.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 09-फरवरी-2020 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 09th Feb 2020, 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 10-Feb-20

A. Power Supply Position at All India and Regional level

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	43924	45532	38522	17884	2291	148153
Peak Shortage (MW)	630	0	0	0	47	677
Energy Met (MU)	963	1116	958	363	39	3439
Hydro Gen (MU)	123	36	68	29	9	264
Wind Gen (MU)	13	87	27			127
Solar Gen (MU)*	38.32	27.70	76.14	1.49	0.04	144
Energy Shortage (MU)	10.5	0.0	0.0	0.0	0.7	11.2
Maximum Demand Met during the day (MW) & time	49206	53171	44591	18518	2328	165209
(from NLDC SCADA)	09:53	09:46	09:23	19:08	18:07	09:46

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	0.041	0.00	0.08	4.49	4.57	71.03	24.40

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	5872	0	121.6	72.6	-0.7	110	0.0
	Haryana	6567	0	122.9	85.0	-0.6	211	0.0
	Rajasthan	13831	0	243.3	72.7	-0.9	435	0.0
	Delhi	4323	0	72.1	48.6	0.7	725	0.0
NR	UP	15709	0	286.3	123.1	-1.7	740	0.0
	Uttarakhand	2003	0	35.6	17.7	-0.9	67	0.0
	HP	1593	0	27.5	22.3	-2.3	51	0.0
	J&K(UT) and Ladakh(UT)	2520	630	49.9	44.4	0.1	362	10.5
	Chandigarh	210	0	3.5	3.6	0.0	39	0.0
	Chhattisgarh	3282	0	69.3	24.1	-1.4	269	0.0
	Gujarat	15204	0	318.9	91.6	4.4	611	0.0
	MP	14510	0	261.6	119.2	-3.2	520	0.0
WR	Maharashtra	21379	0	428.1	128.2	-4.4	446	0.0
WK	Goa	407	0	8.3	8.2	-0.4	35	0.0
	DD	288	0	6.6	6.0	0.6	45	0.0
	DNH	754	0	17.7	17.8	-0.1	42	0.0
	Essar steel	773	0	5.3	5.3	0.0	238	0.0
	Andhra Pradesh	9077	0	180.5	71.8	-0.2	339	0.0
	Telangana	9007	0	192.9	109.0	-2.2	517	0.0
SR	Karnataka	11302	0	214.3	71.0	-1.5	942	0.0
310	Kerala	3373	0	67.0	55.9	1.5	251	0.0
	Tamil Nadu	13092	0	295.9	151.9	-0.7	414	0.0
	Pondy	330	0	6.9	7.2	-0.3	31	0.0
	Bihar	4227	0	75.9	74.7	-0.5	410	0.0
	DVC	3105	0	65.6	-37.1	-0.4	430	0.0
ER	Jharkhand	1284	0	25.4	20.0	-0.3	130	0.0
LIN	Odisha	4476	0	84.3	22.6	1.9	415	0.0
	West Bengal	5766	0	111.2	28.4	0.6	240	0.0
	Sikkim	120	0	1.0	1.2	-0.2	65	0.0
	Arunachal Pradesh	119	1	2.7	2.3	0.3	9	0.0
	Assam	1290	40	20.9	18.6	-0.2	103	0.5
	Manipur	138	1	2.1	2.9	-0.8	63	0.0
NER	Meghalaya	355	0	6.4	5.9	-0.2	29	0.2
	Mizoram	107	1	1.6	1.6	-0.3	42	0.0
	Nagaland	125	1	2,2	2.1	0.0	45	0.0
	Tripura	215	1	3.4	1.6	-0.3	33	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	0.3	-10.5	-12.9
Day peak (MW)	346.3	-571.6	-909.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	223.0	-273.2	120.7	-75.3	6.0	1.1
Actual(MU)	214.6	-288.1	136.9	-65.6	2.7	0.5
O/D/U/D(MU)	-8.4	-14.9	16.2	9.7	-3.3	-0.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	5881	15233	5372	1760	987	29233
State Sector	12680	16095	7220	6540	11	42546
Total	18561	31327	12592	8300	998	71778

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	478	1176	505	433	9	2601
Lignite	24	16	52	0	0	93
Hydro	123	36	68	29	9	264
Nuclear	25	20	40	0	0	84
Gas, Naptha & Diesel	33	35	17	0	22	108
RES (Wind, Solar, Biomass & Others)	81	126	140	2	0	348
Total	764	1409	823	463	40	3499

Share of RES in total generation (%)	10.63	8.91	17.05	0.33	0.10	9.96
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	29.90	12.91	30.09	6.53	22.04	19.91

H. All India Demand Diversity Factor

11 111 India Demand Diversity Luctor		
Based on Regional Max Demands	1.016	
Based on State Max Demands	1.070	

Diversity factor = Sum of regional or state-wise maximum demands / All India maximum demand

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

		<u>IN'</u>	TER-REGIO	ONAL EXCH	ANGES	Date of 1	Reporting :	10-Feb-20
								Import=(+ve) /Export =(-ve)
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU) (MU)
Import/E		ER (With NR)						
5	HVDC	ALIPURDUAR-AGRA PUSAULI B/B	S/C	0	0 378	0.0	9.2	0.0 -9.2
1		GAYA-VARANASI	D/C	0	683	0.0	7.1	-7.1
2	765kV	SASARAM-FATEHPUR	S/C	140	183	0.0	0.1	-0.1
3		GAYA-BALIA	S/C	0	472	0.0	7.7	-7.7
6 7		PUSAULI-VARANASI PUSAULI -ALLAHABAD	S/C S/C	0	285 165	0.0	3.0	-6.1 -3.0
8		MUZAFFARPUR-GORAKHPUR	D/C	122	195	0.0	0.8	-0.8
9	400 kV	PATNA-BALIA	Q/C	0	683	0.0	11.0	-11.0
10		BIHARSHARIFF-BALIA	D/C	0	260	0.0	3.5	-3.5
11	-	MOTIHARI-GORAKHPUR	D/C	0	488	0.0	8.1	-8.1
12	220 kV	BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI	D/C S/C	166 38	132 63	0.4	0.0	-0.3
14	220 117	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	30	0	0.7	0.0	0.7
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	xport of	ER (With WR)			ER-NR	1.1	56.8	-55.6
	Aport OI	T '	0/0	1000		20.0	0.0	20.0
18	765 kV	JHARSUGUDA-DHARAMJAIGARH	Q/C	1820	0	29.8	0.0	29.8
19 20	1	NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-DURG	D/C D/C	780 303	0	10.6 3.5	0.0	10.6 3.5
21	400 1 37	JHARSUGUDA-RAIGARH	Q/C	300	201	1.2	0.0	1.2
22	400 kV	RANCHI-SIPAT	D/C	281	0	5.3	0.0	5.3
23	220 kV	BUDHIPADAR-RAIGARH	S/C	0	1	0.0	0.0	0.0
24		BUDHIPADAR-KORBA	D/C	123	0 ER-WR	1.8 52.2	0.0	1.8 52.2
Import/E	Export of	ER (With SR)			ER-WK	32,2	0.0	32,2
26	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	542.0	0.0	12.3	-12.3
27	HVDC	TALCHER-KOLAR BIPOLE	D/C	0.0	1975.0	0.0	37.4	-37.4
25	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	2905.0	0.0	48.4	-48.4
28 29	400 kV 220 kV	TALCHER-I/C BALIMELA-UPPER-SILERRU	D/C S/C	437.0 1.0	462.0 0.0	4.8 0.0	0.0	4.8 0.0
29	220 KV	BALIWELA-UFFER-SILERRU	3/C	1.0	ER-SR	0.0	98.1	-98.1
Import/E	Export of	ER (With NER)						
30	400 kV	BINAGURI-BONGAIGAON	D/C	0	506	0.0	6.4	-6
31		ALIPURDUAR-BONGAIGAON	D/C	0	657	0.0	8.9	-9
32	220 kV	ALIPURDUAR-SALAKATI	D/C	0	130 ER-NER	0.0	1.6 16.9	-2 -16.9
Import/E	Export of	NER (With NR)			ER-NER	0.0	10.9	-10.9
33	HVDC	BISWANATH CHARIALI-AGRA	-	0	503	0.0	11.2	-11.2
					NER-NR	0.0	11.2	-11.2
	Export of	WR (With NR)	1					
34	HVDC	CHAMPA-KURUKSHETRA	D/C	0 447	0	0.0 8.2	15.9	-15.9 8.2
35 36	пувс	V'CHAL B/B APL -MHG	D/C D/C	0	1	0.2	0.0	8.2
37		GWALIOR-AGRA				0.0		-33.6
38	1		D/C	0	1919 2821	0.0	33.6 46.5	-33.6 -46.5
		PHAGI-GWALIOR	D/C D/C	0			33.6	
39	765 kV	PHAGI-GWALIOR JABALPUR-ORAI	D/C D/C	0	2821 1623 1060	0.0 0.0 0.0	33.6 46.5 23.7 32.8	-46.5 -23.7 -32.8
40	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C S/C	0 0 691	2821 1623 1060 0	0.0 0.0 0.0 11.0	33.6 46.5 23.7 32.8 0.0	-46.5 -23.7 -32.8 11.0
40 41	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C S/C S/C	0 0 691 0	2821 1623 1060 0 1540	0.0 0.0 0.0 11.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3	-46.5 -23.7 -32.8 11.0 -30.3
40	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA	D/C D/C S/C S/C D/C	0 0 691 0 142	2821 1623 1060 0 1540 1093	0.0 0.0 0.0 11.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9	-46.5 -23.7 -32.8 11.0 -30.3 -8.9
40 41 42		PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI	D/C D/C S/C S/C	0 0 691 0	2821 1623 1060 0 1540	0.0 0.0 0.0 11.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3	-46.5 -23.7 -32.8 11.0 -30.3
40 41 42 43	765 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI	D/C D/C S/C S/C S/C S/C S/C	0 0 691 0 142 102	2821 1623 1060 0 1540 1093 175	0.0 0.0 0.0 11.0 0.0 0.0 0.1	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1
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 S/C S/C D/C S/C S/C D/C S/C S/C D/C S/C D/C	0 0 691 0 142 102 92 989 41	2821 1623 1060 0 1540 1093 175 363 0 398	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 23.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4
40 41 42 43 44 45 46 47		PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA - BHINMAL VCHAL -RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR	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	0 0 691 0 142 102 92 989 41	2821 1623 1060 0 1540 1093 175 363 0 398 73	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 23.0 0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1
40 41 42 43 44 45 46 47 48		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 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 0 691 0 142 102 92 989 41 17 22	2821 1623 1060 0 1540 1093 175 363 0 398 73 119	0.0 0.0 0.0 11.0 0.0 0.1 0.0 23.0 0 0.4 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0
40 41 42 43 44 45 46 47	400 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	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	0 0 691 0 142 102 92 989 41	2821 1623 1060 0 1540 1093 175 363 0 398 73 119	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 23.0 0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1
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	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 0 691 0 142 102 92 989 41 17 22 102	2821 1623 1060 0 1540 1093 175 363 0 398 73 119	0.0 0.0 0.0 11.0 0.0 0.1 0.0 23.0 0 0.4 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4
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-RANPUR BHANPURA-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 0 691 0 142 102 92 989 41 17 22 102 61	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18	0.0 0.0 0.0 11.0 0.0 0.1 0.0 0.1 0.0 23.0 0 0.4 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4 0.6
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 VCHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-MORAK MEHGAON-AURAIYA MALANPUR-JURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR)	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 691 0 142 102 92 989 41 17 22 102 61	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 23.0 0 0.4 0.0 1.4 0.6 0.0 44.7	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 0.0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4 0.6 0.0 -154.0
40 41 42 43 44 45 46 47 48 49 50 51 Import/E	- 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 MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR WR (With SR) BHADRAWATI B/B	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 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 23.0 0 0.4 0.0 1.4 0.6 0.0 44.7	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 198.6	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 0.6 0.0 -154.0
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 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 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.1 0.0 23.0 0 0.4 0.0 1.4 0.6 0.0 44.7	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 198.6	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4 0.6 0.0 -154.0
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 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 S/C S	0 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 23.0 0 0.4 0.0 1.4 0.6 0.0 44.7	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 0.0 198.6	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 0.6 0.0 -154.0
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53	- 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	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 198.6	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4 0.6 0.0 -154.0
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 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 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 0.0 198.6 19.8 0.0 29.5	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4 0.6 0.0 -154.0
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 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) BHANRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR WARDHA-NIZAMBAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-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 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 18 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 4 0.4 1.0 0.0 0.0 198.6 0.0 29.5 42.6 0.0 0.0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 -1.0 -1.4 0.6 0.0 -154.0 -19.8 0.0 -29.5 -42.6 7.8 0.0 0.0
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56	- 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 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-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI	D/C D/C S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 118 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 0.0 198.6 19.8 0.0 29.5 42.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 -1.4 0.6 0.0 -154.0 -19.8 0.0 -29.5 -42.6 7.8 0.0 0.0 1.3
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57	- 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA 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 S	0 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 118 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 4 0.4 1.0 0.0 0.0 198.6 0.0 29.5 42.6 0.0 0.0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 -1.4 0.6 0.0 -154.0 -19.8 0.0 -29.5 -42.6 7.8 0.0 0.0
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58 59	- 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 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 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 S/C S/C S/C S/C S/C S/C S/C S/C S/C S	0 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 118 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 0.0 198.6 19.8 0.0 29.5 42.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 1.4 0.6 0.0 -154.0 -19.8 0.0 -29.5 -42.6 7.8 0.0 0.0 1.3 -82.7
40 41 42 43 44 45 46 47 48 49 50 51 Import/E 52 53 54 55 56 57 58	- 400 kV - 220 kV - 132kV - 2xport of - HVDC - 765 kV - 400 kV	PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI CHITTORGARH-BANASKANTHA ZERDA-KANKROLI ZERDA-BHINMAL V'CHAL-RIHAND RAPP-SHUJALPUR BHANPURA-RANPUR BHANPURA-RANPUR BHANPURA-WARIYA 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 S	0 0 691 0 142 102 92 989 41 17 22 102 61 0	2821 1623 1060 0 1540 1093 175 363 0 398 73 119 0 118 0 WR-NR	0.0 0.0 0.0 11.0 0.0 0.0 0.1 0.0 0.0 0.1 0.0 0.0	33.6 46.5 23.7 32.8 0.0 30.3 8.9 0.0 2.1 0.0 4 0.4 1.0 0.0 0.0 0.0 198.6 19.8 0.0 29.5 42.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-46.5 -23.7 -32.8 11.0 -30.3 -8.9 0.1 -2.1 23.0 -4 0.1 -1.0 -1.4 0.6 0.0 -154.0 -19.8 0.0 -29.5 -42.6 7.8 0.0 0.0 1.3