

# 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, क़त्ब इन्स्टीट्यूशनल एरिया, कटवारिया सराये, न्यू दिल्ली-110016

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 25<sup>th</sup> May 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. 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 24.05.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 24-मई-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 24<sup>th</sup> May 2018, is available at the NLDC website.

धन्यवाद,

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

**Date of Reporting** 

25-May-18

## Report for previous day

### A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW)	51706	48342	40382	21790	2380	164601
(at 2000 hrs; from RLDCs)		100.12	10002	22.70		10.001
Peak Shortage (MW)	418	12	0	0	190	620
Energy Met (MU)	1240	1195	901	451	44	3832
Hydro Gen (MU)	219	24	39	84	16	382
Wind Gen (MU)	8	88	49			146
Solar Gen (MU)*	16.55	19.42	50.01	0.77	0.02	87
Energy Shortage (MU)	14.3	0.0	0.0	0.0	0.8	15.1
Maximum Demand Met during the day	54346	53931	41468	21976	2346	168673
(MW) & time (from NLDC SCADA)	23:07	15:26	20:04	19:19	20:24	15:26

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	0.053	0.00	0.98	15.60	16.59	77.34	6.08

**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	8325	0	183.5	73.3	-1.6	78	0.0
	Haryana	7961	0	168.5	85.0	1.6	311	2.3
	Rajasthan	10522	0	236.0	76.9	6.1	646	3.6
	Delhi	5949	0	123.1	94.1	-1.1	187	0.1
NR	UP	18365	0	420.6	180.4	3.8	729	0.0
	Uttarakhand	2071	0	44.1	21.5	0.4	126	0.7
	HP	1346	0	26.7	6.3	3.5	416	0.2
	J&K	1672	418	31.5	10.5	2.7	335	7.4
	Chandigarh	319	0	6.0	5.9	0.2	39	0.0
	Chhattisgarh	3655	0	86.0	18.6	1.1	154	0.0
	Gujarat	15755	0	359.6	135.7	6.3	572	0.0
	MP	8612	0	194.1	102.7	-3.2	427	0.0
VA/D	Maharashtra	22973	0	512.4	141.9	-0.8	455	0.0
WR	Goa	498	0	11.2	11.1	-0.5	92	0.0
	DD	346	0	7.7	6.9	0.8	85	0.0
	DNH	782	0	17.2	17.8	-0.6	105	0.0
	Essar steel	381	0	7.0	6.4	0.7	170	0.0
	Andhra Pradesh	8492	0	177.2	69.4	-0.1	496	0.0
	Telangana	7162	0	155.9	51.7	-1.9	281	0.0
SR	Karnataka	8736	0	170.8	48.3	-3.3	420	0.0
3N	Kerala	3680	0	72.4	51.8	1.6	248	0.0
	Tamil Nadu	14116	0	316.8	148.5	-0.4	430	0.0
	Pondy	378	0	8.3	8.4	-0.1	52	0.0
	Bihar	4535	0	90.4	90.4	-2.8	200	0.0
	DVC	3006	0	71.9	-46.6	1.2	225	0.0
ER	Jharkhand	1209	0	26.2	20.3	1.3	85	0.0
EK	Odisha	4873	0	97.8	43.0	-0.8	225	0.0
	West Bengal	8089	0	164.5	48.0	1.8	225	0.0
	Sikkim	79	0	0.6	1.8	-1.4	15	0.0
	Arunachal Pradesh	105	2	2.3	2.0	0.3	44	0.0
	Assam	1464	154	27.1	22.8	0.2	206	0.6
	Manipur	150	5	2.1	2.3	-0.2	30	0.0
NER	Meghalaya	292	0	5.0	1.8	-0.2	35	0.0
	Mizoram	89	1	1.6	0.6	0.1	6	0.0
	Nagaland	116	5	2.0	1.8	0.1	41	0.0
	Tripura	255	3	3.8	3.3	-0.5	38	0.0

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	16.0	-5.9	-14.6
Day peak (MW)	862.2	-378.5	-658.7

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	230.2	-221.6	51.3	-61.8	2.8	0.9
Actual(MU)	246.6	-224.5	43.0	-60.8	0.3	4.6
O/D/U/D(MU)	16.4	-2.9	-8.2	0.9	-2.5	3.7

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4223	11679	7492	1350	139	24883
State Sector	5615	14232	4330	5215	50	29442
Total	9838	25911	11822	6565	189	54324

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Thermal (Coal & Lignite)	675	1231	633	458	8	3006
Hydro	219	23	41	84	16	384
Nuclear	31	18	46	0	0	95
Gas, Naptha & Diesel	38	60	19	0	23	140
RES (Wind, Solar, Biomass & Others)	45	108	137	1	0	291
Total	1007	1440	877	544	47	3915
l	1					

Share of RES in total generation (%)	4.42	7.49	15.67	0.25	0.06	7.44
Share of Non-fossil fuel (Hydro, Nuclear and	20.24	10.25	25 50	15.74	24.55	19.66
RFS) in total generation (%)	29.24	10.35	25.50	15.74	34.55	19.00

H. Diversity Factor

All India Demand Diversity Factor 1.032

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

		INTER-REGIONAL EXCHANGES  Date of Reporting:					25-May-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/I	Export of	ER (With NR)	D/C	5.4	241	0.0	5.0	5.0
2	765kV	GAYA-VARANASI SASARAM-FATEHPUR	D/C S/C	54 243	341 172	0.0	5.0	-5.0 -0.7
3		GAYA-BALIA	S/C	0	572	0.0	9.6	-9.6
4	HVDC	ALIPURDUAR-AGRA	- 5/6	0	284	0.0	12.1	-12.1
5 6		PUSAULI B/B PUSAULI-VARANASI	S/C S/C	106 75	0 46	2.5 0.0	0.0	2.5 0.0
7		PUSAULI -ALLAHABAD	S/C	134	0	0.0	0.0	0.0
8		MUZAFFARPUR-GORAKHPUR	D/C	2	585	0.0	7.3	-7.3
9	400 kV	PATNA-BALIA	Q/C	0	1085	0.0	18.2	-18.2
10	_	BIHARSHARIFF-BALIA	D/C	0	463	0.0	7.0	-7.0
11		MOTIHARI-GORAKHPUR BIHARSHARIFF-VARANASI	D/C D/C	330	318	0.0	5.4 1.7	-5.4 -1.7
13	220 kV	PUSAULI-SAHUPURI	S/C	0	210	0.0	4.4	-4.4
14	220117	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15	132 kV	GARWAH-RIHAND	S/C	35	0	0.6	0.0	0.6
16	132 KV	KARMANASA-SAHUPURI	S/C	1	1	0.0	0.0	0.0
17		KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
Import/I	Export of	ER (With WR)	_		ER-NR	3.1	71.4	-68.3
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	1161	0	15.0	0.0	15.0
19	103 KV	NEW RANCHI-DHARAMJAIGARH	D/C	525	6	5.2	0.0	5.2
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	1105	0	16.5	0.0	16.5
21		RANCHI-SIPAT	D/C	270	0	2.3	0.0	2.3
22	220 kV	BUDHIPADAR-RAIGARH BUDHIPADAR-KORBA	S/C D/C	167 180	9	1.9 2.5	0.0	2.5
		I	D/C	100	ER-WR	43.5	0.0	43.5
<u>1mport/1</u> 24	Export of 765 kV	ER (With SR) ANGUL-SRIKAKULAM	D/C	0.0	1415.8	0.0	23.3	-23.3
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	410.4	0.0	9.5	-9.5
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1677.2	0.0	29.4	-29.4
27	400 kV	TALCHER-I/C	D/C	681.4	0.4	0.0	12.7	-12.7
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0	0.0	0.0	0.0
Import/I	Export of	f ER (With NER)			ER-SR	0.0	62.2	-62.2
29	_	BINAGURI-BONGAIGAON	D/C	0	389	0.0	7.2	-7
30	400 kV							
		ALIPURDUAR-BONGAIGAON	D/C	113	179	0.0	1.6	-2
31	220 kV	ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C D/C	0	146	0.0	2.4	-2
31	Export of		<u> </u>		146 ER-NER 500	0.0	2.4 11.2	-2 -11.2
31 Import/I 32	Export of HVDC	ALIPURDUAR-SALAKATI  NER (With NR)	D/C	0	146 ER-NER	0.0	2.4 11.2	-2 -11.2
31 Import/I 32	Export of HVDC	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA	D/C - D/C	0	146 ER-NER 500 NER-NR	0.0	2.4 11.2 12.2 12.2 54.2	-2 -11.2 -12.2 -12.2 -54.2
31 Import/I 32 Import/I 33 34	Export of HVDC Export of	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA V'CHAL B/B	D/C - D/C D/C	0 0 184 250	146 ER-NER 500 NER-NR 1250 200	0.0 0.0 0.0 0.0 0.0 0.6	2.4 11.2 12.2 12.2 54.2 2.3	-2 -11.2 -12.2 -12.2 -54.2 -1.7
31  Import/I 32  Import/I 33 34 35	Export of HVDC Export of	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  V'CHAL B/B  APL -MHG	D/C  -  D/C  D/C  D/C  D/C	0 0 184 250 0	146 ER-NER 500 NER-NR 1250 200 1614	0.0 0.0 0.0 0.0 0.0 0.6 0.0	2.4 11.2 12.2 12.2 54.2 2.3 29.7	-2 -11.2 -12.2 -12.2 -54.2 -1.7 -29.7
31  Import/I  32  Import/I  33  34  35  36	Export of HVDC Export of	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  V'CHAL B/B  APL -MHG  GWALIOR-AGRA	D/C  -  D/C  D/C  D/C  D/C  D/C	0 0 184 250 0 0	146 ER-NER 500 NER-NR 1250 200 1614 1360	0.0 0.0 0.0 0.0 0.6 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2	-2 -11.2 -12.2 -12.2 -54.2 -1.7 -29.7 -28.2
31  Import/I 32  Import/I 33 34 35	Export of HVDC Export of	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  V'CHAL B/B  APL -MHG	D/C  -  D/C  D/C  D/C  D/C	0 0 184 250 0	146 ER-NER 500 NER-NR 1250 200 1614	0.0 0.0 0.0 0.0 0.0 0.6 0.0	2.4 11.2 12.2 12.2 54.2 2.3 29.7	-2 -11.2 -12.2 -12.2 -54.2 -1.7 -29.7
31 Import/I 32 Import/I 33 34 35 36 37	Export of HVDC  Export of HVDC	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  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  D/C  D/C	0 0 184 250 0 0	146 ER-NER 500 NER-NR 1250 200 1614 1360 1726	0.0 0.0 0.0 0.0 0.6 0.0 0.0 0.0	2.4 11.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4	-2 -11.2 -12.2 -12.2 -54.2 -1.7 -29.7 -28.2 -32.4
31  Import/I 32  Import/I 33 34 35 36 37 38	Export of HVDC  Export of HVDC	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  D/C  S/C  S	0 184 250 0 0 0 0 587 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808	0.0 0.0 0.0 0.0 0.6 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1	-2 -11.2 -12.2 -12.2 -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41	Export of HVDC  Export of HVDC	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  S/C  S/C	0 0 184 250 0 0 0 0 587 0 390	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0	-2 -11.2 -12.2 -12.2 -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42	Export of HVDC  Export of HVDC	NER (With NR) BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  S/C  S/C	0 184 250 0 0 0 0 587 0 390 345	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43	Export of HVDC  Export of HVDC  765 kV	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  S/C  S/C	0 184 250 0 0 0 0 587 0 390 345 965	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42	Export of HVDC  Export of HVDC  765 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  S/C  S/C	0 184 250 0 0 0 0 587 0 390 345 965 183	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44	Export of HVDC  Export of HVDC  765 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0 184 250 0 0 0 0 587 0 390 345 965	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45	Export of HVDC  Export of HVDC  765 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  S/C  S/C	0 184 250 0 0 0 0 587 0 390 345 965 183 64	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	Export of HVDC  Export of HVDC  765 kV  400 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 184 250 0 0 0 0 587 0 390 345 965 183 64 5 15 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.2 1.0 0.2 0.7	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Export of HVDC  Export of HVDC  765 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0 184 250 0 0 0 0 587 0 390 345 965 183 64 5 15	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV	NER (With NR) BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 184 250 0 0 0 0 587 0 390 345 965 183 64 5 15 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.4 11.2 12.2 12.2 12.2 54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.2 1.0 0.2 0.7	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/I 50	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC	NER (With NR)  BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 184 250 0 0 0 587 0 390 345 965 183 64 5 15 0 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 0.7 0.0 209.9	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/I 50 51	Export of HVDC  Export of HVDC  765 kV  400 kV  220 kV  132kV	NER (With NR)  BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0  184 250 0 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 1.0 0.2 0.7 0.0 209.9	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0
31  Import/I 32  Import/I 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49  Import/I 50 51 52	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0 184 250 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 657	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 0.7 0.0 209.9	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0 -3.3
31  Import/I 32  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	Export of HVDC  Export of HVDC  765 kV  220 kV  132kV  Export of HVDC LINK  765 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0  184 250 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 0 953	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 657 1351	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 1.0 0.2 209.9  16.8 0.0 3.3 18.3	-2 -11.2  -12.2 -12.2  -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0 -3.3 -18.3
31  Import/I 32  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	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC LINK	NER (With NR) BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0  184 250 0 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 0 953 0 1004	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 657 1351 0	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 0.7 0.0 209.9  16.8 0.0 3.3 18.3 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0 -3.3 -18.3 17.4
31  Import/I 32  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	Export of HVDC  Export of HVDC  765 kV  220 kV  132kV  Export of HVDC LINK  765 kV	NER (With NR) BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0  184 250 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 0 953	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 657 1351	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 1.0 0.2 209.9  16.8 0.0 3.3 18.3	-2 -11.2  -12.2 -12.2  -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0 -3.3 -18.3
31  Import/I 32  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  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC LINK  765 kV	NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA  V'CHAL B/B  APL -MHG  GWALIOR-AGRA  PHAGI-GWALIOR  JABALPUR-ORAI  GWALIOR-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  D/C  S/C  S	0  184 250 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 953 0 1004 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 657 1351 0 0	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.0 0.2 1.0 0.2 0.7 0.0 209.9  16.8 0.0 3.3 18.3 0.0 0.0	-2 -11.2  -12.2 -12.2  -12.2  -54.2  -1.7  -29.7  -28.2  -32.4  -18.8  5.9  -42.1  6.5  4.1  22.7  2  0.0  -1.0  -0.2  -0.7  0.0  -167.4  -16.8  0.0  -3.3  -18.3  17.4  0.0
31  Import/I 32  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 56	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC LINK  765 kV	NER (With NR)  BISWANATH CHARIALI-AGRA  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	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0  184 250 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 0 953 0 1004 0 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 657 1351 0 0 0	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.2 1.0 0.2 1.0 0.2 209.9  16.8 0.0 3.3 18.3 0.0 0.0 0.0	-2 -11.2  -12.2 -12.2  -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0 -3.3 -18.3 17.4 0.0 0.0
31  Import/I 32  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 56	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC LINK  765 kV	NER (With NR)  BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0  184 250 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 0 953 0 1004 0 0	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 0 0 WR-SR	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.2 1.0 0.2 1.0 0.2 0.7 0.0 209.9  16.8 0.0 3.3 18.3 0.0 0.0 0.0 0.0	-2 -11.2  -12.2 -12.2  -54.2 -1.7 -29.7 -28.2 -32.4 -18.8 5.9 -42.1 6.5 4.1 22.7 2 0.0 -1.0 -0.2 -0.7 0.0 -167.4  -16.8 0.0 -3.3 -18.3 17.4 0.0 0.0 1.5
31  Import/I 32  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 56	Export of HVDC  Export of HVDC  765 kV  400 kV  132kV  Export of HVDC LINK  765 kV	NER (With NR)  BISWANATH CHARIALI-AGRA  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  D/C  S/C  S	0  184 250 0 0 0 0 0 0 587 0 390 345 965 183 64 5 15 0 0 0 953 0 1004 0 0 73	146 ER-NER  500 NER-NR  1250 200 1614 1360 1726 1005 0 1808 0 0 0 41 73 64 67 0 WR-NR  1000 0 0 0 WR-SR	0.0  0.0  0.0  0.0  0.0  0.0  0.0  0.0	2.4 11.2  12.2 12.2  54.2 2.3 29.7 28.2 32.4 18.8 0.0 42.1 0.0 0.0 0.0 0.0 0.2 1.0 0.2 1.0 0.2 0.7 0.0 209.9  16.8 0.0 3.3 18.3 0.0 0.0 0.0 0.0	-2 -11.2  -12.2 -12.2  -12.2  -54.2  -1.7  -29.7  -28.2  -32.4  -18.8  5.9  -42.1  6.5  4.1  22.7  2  0.0  -1.0  -0.2  -0.7  0.0  -167.4  -16.8  0.0  -3.3  -18.3  17.4  0.0  0.0  1.5