

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

Ref: POSOCO/NLDC/SO/Daily PSP Report

दिनांक: 05<sup>th</sup> May 2018

To,

- 1. 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 04.05.2018.

महोदय/Dear Sir,

आई०ई०जी०सी०-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 04-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 04<sup>th</sup> May 2018, is available at the NLDC website.

धन्यवाद,

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

Report for previous day	Date of Reporting	5-May-18

Α.	Maximum	Damand	

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	46103	47659	39666	19997	2104	155529
Peak Shortage (MW)	964	128	0	0	236	1328
Energy Met (MU)	1006	1163	858	415	37	3479
Hydro Gen(MU)	194	52	52	60	10	368
Wind Gen(MU)	7	48	29			84
Solar Gen (MU)*	18.20	20.70	49.88	0.88	0.01	90
Energy Shortage (MU)	13.6	0.0	0.0	0.0	1.6	15.2
Maximum Demand Met during the day (MW) (from NLDC SCADA)	47420	51641	41927	20482	2192	158885

## 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	0.050	0.00	0.21	15.63	15.83	78.46	5.71

C. Power Supply Position in States

RegionRegion	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	6703	0	137.7	71.0	-0.9	79	0.0
	Haryana	6529	0	138.7	77.1	1.7	199	1.7
	Rajasthan	9217	0	207.9	71.6	4.7	530	2.5
	Delhi	4789	0	97.6	83.3	-1.4	94	0.0
NR	UP	15840	250	318.0	141.5	4.8	790	0.0
	Uttarakhand	1868	0	37.8	15.8	2.5	243	0.2
	HP	1316	0	24.9	8.6	5.1	492	0.0
	J&K	2125	531	38.2	22.4	-5.5	160	9.1
	Chandigarh	255	0	4.9	4.9	0.0	19	0.0
	Chhattisgarh	3633	0	84.6	14.8	-0.8	74	0.0
	Gujarat	16110	0	354.4	182.5	7.0	553	0.0
	MP	8589	0	186.1	89.4	-3.0	301	0.0
WR	Maharashtra	22537	0	498.2	145.1	-3.4	595	0.0
	Goa	502	0	11.5	10.7	0.2	44	0.0
	DD	337	0	7.5	7.0	0.4	79	0.0
	DNH	724	0	17.2	17.2	0.0	21	0.0
	Essar steel	262	0	3.6	3.7	-0.1	195	0.0
	Andhra Pradesh	7270	0	147.6	42.5	-0.9	498	0.0
	Telangana	6550	0	127.7	41.5	-2.2	423	0.0
SR	Karnataka	9592	0	187.0	67.7	-1.5	553	0.0
JN	Kerala	3801	0	73.1	52.1	1.0	169	0.0
	Tamil Nadu	14684	0	314.7	157.3	-0.6	645	0.0
	Pondy	372	0	8.3	8.3	-0.1	36	0.0
	Bihar	4529	0	78.0	78.6	-2.4	90	0.0
	DVC	3072	0	69.2	-47.9	-0.2	100	0.0
ER	Jharkhand	1071	0	23.0	17.5	0.5	170	0.0
LIX	Odisha	4352	0	89.4	41.1	0.8	110	0.0
	West Bengal	7830	0	154.1	31.7	3.9	312	0.0
	Sikkim	104	0	1.3	1.6	-0.3	30	0.0
	Arunachal Pradesh	112	0	2.1	2.0	0.1	26	0.0
	Assam	1262	193	20.9	17.2	0.9	106	1.4
	Manipur	143	2	2.2	2.3	-0.2	27	0.0
NER	Meghalaya	274	0	5.0	2.3	-0.1	36	0.0
	Mizoram	82	0	1.6	1.4	-0.2	1	0.0
	Nagaland	107	1	2.0	2.0	-0.1	27	0.0
	Tripura	191	0	3.1	2.9	-0.9	74	0.1

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	8.8	-7.3	-13.8
Day peak (MW)	408.2	-411.1	-624.6

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	189.3	-164.1	66.5	-92.4	0.1	-0.6
Actual(MU)	199.6	-157.2	53.2	-91.6	-3.1	1.0
O/D/U/D(MU)	10.3	6.9	-13.3	0.8	-3.2	1.6

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4841	13728	6422	500	156	25647
State Sector	9725	16025	5290	4705	50	35795
Total	14566	29753	11712	5205	206	61442

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	Total
Thermal (Coal & Lignite)	517	1151	589	467	9	2733
Hydro	194	52	54	60	10	370
Nuclear	25	18	46	0	0	88
Gas, Naptha & Diesel	32	54	21	0	24	130
RES (Wind, Solar, Biomass & Others)	54	69	112	1	0	236
Total	821	1344	820	529	43	3557

<sup>\*&</sup>lt;u>Source</u>: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data. सचिव(कर्जा)संपुक्त सचिव(पांपण)(ओ एम)निरंतराक(ओ एम)पुंख्य अभिषता-के०वि॰प्रा०(धि॰प्र०)/ पुख्य कार्षपालक अधिकारी(पोसोको)/सभी राज्यों के मुख्य सचिव(कर्जा सचिव

						Date of F	Reporting :	5-May-
								Import=(+ve) /Export =(-ve) for NET (MU)
SI No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
mport/E	Export of	ER (With NR) GAYA-VARANASI	D/C	0	262	0.0	9.0	-9.0
2	765kV	SASARAM-FATEHPUR	D/C S/C	69	181	0.0	0.9	-9.0
3		GAYA-BALIA	S/C	0	519	0.0	9.6	-9.6
4	HVDC	ALIPURDUAR-AGRA	- 0/0	0	0	0.0	0.0	0.0
5		PUSAULI B/B PUSAULI-VARANASI	S/C S/C	4 54	149 90	0.0	0.0	-2.9 0.0
7		PUSAULI -ALLAHABAD	S/C	66	117	0.0	0.0	0.0
8		MUZAFFARPUR-GORAKHPUR	D/C	5	734	0.0	11.4	-11.4
9	$400 \; \mathrm{kV}$	PATNA-BALIA	Q/C	0	1241	0.0	23.3	-23.3
10	-	BIHARSHARIFF-BALIA	D/C	0	559	0.0	9.9	-9.9
11	-	MOTIHARI-GORAKHPUR	D/C	0	297	0.0	5.7	-5.7
12	220 kV	BIHARSHARIFF-VARANASI PUSAULI-SAHUPURI	D/C S/C	417 0	0 190	0.0	3.5	-3.5 -3.8
14	220 K V	SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
15		GARWAH-RIHAND	S/C	10	0	0.5	0.0	0.5
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
nport/E	Export of	ER (With WR)			ER-NR	0.5	79.9	-79.4
18	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C	D/C	145	289	0.0	3.2	-3.2
19	/05 KV	NEW RANCHI-DHARAMJAIGARH	D/C	203	562	0.0	3.1	-3.1
20	400 kV	JHARSUGUDA-RAIGARH	Q/C	599	53	7.1	0.0	7.1
21	400 KV	RANCHI-SIPAT	D/C	452	0	7.8	0.0	7.8
22	220 kV	BUDHIPADAR-RAIGARH	S/C	35	50	0.0	0.3	-0.3
23		BUDHIPADAR-KORBA	D/C	281	0 ER-WR	4.3 19.2	0.0 6.6	4.3 12.7
mport/F	Export of	ER (With SR)			EK-WK	19.2	0.0	12.7
24	765 kV	ANGUL-SRIKAKULAM	D/C	0.0	1092.8	0.0	20.2	-20.2
25	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0.0	345.7	0.0	16.1	-16.1
26	LINK	TALCHER-KOLAR BIPOLE	D/C	0.0	1880.5	0.0	36.0	-36.0
27	400 kV	TALCHER-I/C	D/C	499.5	63.2	4.7	1.3	3.4
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	0.0	0.0 ER-SR	0.0	72.4	0.0 -72.4
mport/E	Export of	ER (With NER)						
29	400 kV	BINAGURI-BONGAIGAON	D/C	373	100	1.7	0.0	2
30		ALIPURDUAR-BONGAIGAON	D/C	267	112	3.0	0.0	3
31	220 kV	ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C D/C	267 3	73	0.0	0.8	-1
31	220 kV Export of	ALIPURDUAR-SALAKATI NER (With NR)		3	73 ER-NER	0.0 4.7	0.8	-1 <b>4.0</b>
31	220 kV Export of	ALIPURDUAR-SALAKATI			73 ER-NER	0.0 4.7	0.8 0.8	-1 <b>4.0</b> 0.0
31 mport/F 32	220 kV Export of HVDC	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA		3	73 ER-NER	0.0 4.7	0.8	-1 <b>4.0</b>
31 mport/F 32 mport/F	220 kV Export of HVDC	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)	D/C	0	73 ER-NER  0 NER-NR	0.0 4.7 0.0 0.0	0.8 <b>0.8</b> 0.0 <b>0.0</b>	-1 4.0 0.0 0.0
31 mport/E 32	220 kV Export of HVDC	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA		3	73 ER-NER	0.0 4.7	0.8 0.8	-1 <b>4.0</b> 0.0
31 mport/F 32 mport/F 33	220 kV Export of HVDC Export of	ALIPURDUAR-SALAKATI  NER (With NR)  BISWANATH CHARIALI-AGRA  WR (With NR)  CHAMPA-KURUKSHETRA	D/C - D/C	0 0	73 ER-NER 0 NER-NR	0.0 4.7 0.0 0.0	0.8 0.8 0.0 0.0 49.3	-1 4.0 0.0 0.0
31 mport/F 32 mport/F 33 34 35 36	220 kV 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 0 0 0	73 ER-NER 0 NER-NR 2106 250 307 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0	0.8 0.8 0.0 0.0 49.3 5.0 8.2 0.0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0
31 mport/F 32 mport/F 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  D/C	0 0 0 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8 0.0 0.0 49.3 5.0 8.2 0.0 41.7	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7
31 mport/F 32 mport/F 33 34 35 36 37 38	220 kV 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  PHAGI-GWALIOR  JABALPUR-ORAI	D/C  D/C  D/C  D/C  D/C  D/C  D/C  D/C	0 0 0 0 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7
31 mport/F 32 mport/F 33 34 35 36 37 38 39	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  JABALPUR-ORAI  GWALIOR-ORAI	D/C   S/C   S/C	0 0 0 0 0 0 0 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0
31 mport/F 32 mport/F 33 34 35 36 37 38 39 40	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  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI	D/C   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   D/C   D/C	0 0 0 0 0 0 0 0 0 0 0 258	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6
31 mport/F 32 mport/F 33 34 35 36 37 38 39	220 kV 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  JABALPUR-ORAI  GWALIOR-ORAI	D/C   S/C   S/C	0 0 0 0 0 0 0 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0
31 mport/F 32 mport/F 33 34 35 36 37 38 39 40 41	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  JABALPUR-ORAI  GWALIOR-ORAI  ZETDA-KANKROLI	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 0 258 1910 433	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8
31 mport/F 32 mport/F 33 34 35 36 37 38 39 40 41 42	220 kV 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  JABALPUR-ORAI  GWALIOR-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 258 1910 433 367	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1
31 mport/F 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44 45	220 kV 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 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  D/C  S/C  S	0 0 0 0 0 0 0 0 258 1910 433 367 967 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 0 289	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 3	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7
31 mport/F 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46	220 kV 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  JABALPUR-ORAI  GWALIOR-ORAI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-MORAK	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7
31 mport/F 32 mport/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	220 kV 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  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/C S/C S/C S/C S/C S/C S/C S/C S	0 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2
31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	220 kV Export of HVDC Export of HVDC 765 kV 400 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-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  D/C	3 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28 127	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 0 289 12 39 0 0 0 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0 0.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0
31 mport/E 32 mport/S 33 34 35 36 37 38 39 40 41 42 42 44 45 46 47 47 48 48 49	220 kV Export of HVDC Export of HVDC  765 kV  400 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  RAPP-SHUJALPUR  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR	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 0 0 0 0 258 1910 433 367 967 0 78 28	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39 0	0.0 4.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2
31 mport/F 32 mport/F 33 34 35 36 37 38 39 44 41 42 43 44 44 45 46 47 48 49 mport/F mp	220 kV Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of	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  ZERDA-KANKROLI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-MOTA  BADOD-MOTA  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	0 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28 127 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 112 39 0 0 0 WR-NR	0.0 4.7  0.0 0.0  0.0  0.0  0.0  0.0  0.	0.8 0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0
31 mport/F 32 mport/F 33 34 45 40 44 45 46 47 48 49 mport/F 50	220 kV Export of HVDC Export of HVDC  765 kV  400 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  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  D/C	3 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28 127	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39 0 0 0 WR-NR	0.0 4.7  0.0 0.0  0.0  0.0  0.0  0.0  0.	0.8 0.8 0.0 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0  0.0 0.0  -49.3 -5.0 -8.2 -0.0 -41.7 -13.7 -4.0 -43.6 -8.8 -6.1 -22.9 -3 -0.7 -0.2 -0.0 -0.0 -119.9
31 mport/F 32 mport/F 33 34 35 36 37 38 39 44 41 42 43 44 44 45 46 47 48 49 mport/F mp	220 kV Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK	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  ZERDA-KANKROLI  ZERDA-KANKROLI  ZERDA -BHINMAL  V'CHAL -RIHAND  RAPP-SHUJALPUR  BADOD-MOTA  BADOD-MOTA  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	3 0 0 0 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 788 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 112 39 0 0 0 WR-NR	0.0 4.7  0.0 0.0  0.0  0.0  0.0  0.0  0.	0.8 0.8 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 43.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0 -0.1
31 32 32 33 34 35 36 37 38 39 40 41 42 42 43 44 45 46 47 48 49	220 kV Export of HVDC Export of HVDC 765 kV 400 kV 132kV 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  JABALPUR-ORAI  GWALIOR-ORAI  SATNA-ORAI  ZERDA-KANKROLI  ZERDA-BHINMAL  V'CHAL-RIHAND  RAPP-SHUJALPUR  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  WR (With SR)  BHADRAWATI B/B  BARSUR-L-SILERU	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 258 1910 433 367 967 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39 0 0 0 WR-NR	0.0 4.7  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8  0.8  0.0  0.0  0.0  49.3  5.0  8.2  0.0  41.7  13.7  0.0  0.0  0.0  0.0  0.0  0.0  164.5	-1 4.0 0.0 0.0 -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0 0.0 -119.9
31 mport/F 32 mport/F 33 34 36 37 38 39 40 41 42 43 43 44 45 46 47 48 48 49 mport/F 50 51	220 kV Export of HVDC Export of HVDC 765 kV 400 kV 132kV Export of HVDC LINK	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 RAPP-SHUJALPUR 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 0 0 0 0 0 0 0 258 1910 433 367 967 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39 0 0 WR-NR	0.0 4.7  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8 0.8 0.0 0.0 0.0 0.0 49.3 5.0 8.2 0.0 41.7 13.7 0.0 0.0 0.0 0.0 0.0 0.0 164.5	-1 4.0  0.0 0.0  -49.3  -5.0 -8.2 0.0 -41.7 -13.7 -13.7 -13.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0 0.0 -119.9
31 mmport/E 32 mmport/S 33 34 35 36 37 38 39 40 40 41 42 43 44 45 46 47 48 49 mmport/E 50 51 52 53 53 54 55 55	220 kV Export of HVDC Export of HVDC 765 kV  400 kV  132kV Export of HVDC LINK 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-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 WARDHA-NIZAMBAD 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 S/C S/C S/C S/C S/C S/C S/C S	0 0 0 0 0 0 0 0 258 1910 433 367 967 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 112 39 0 0 WR-NR  1000 0 768 1379 0 0 0	0.0 4.7  0.0 0.0  0.0  0.0  0.0  0.0  0.	0.8 0.8 0.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-1 4.0  0.0 0.0  -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0 0.0 -119.9  -21.1 0.0 0.3 -12.4 7.2
31 mport/F 32 mport/F 33 34 35 36 37 38 40 41 42 43 44 45 46 47 7 50 51 52 53 53 54	220 kV Export of HVDC Export of HVDC 765 kV  400 kV  132kV Export of HVDC LINK 765 kV	ALIPURDUAR-SALAKATI  NER (With NR) BISWANATH CHARIALI-AGRA  WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -RIHAND RAPP-SHUALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L-SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 112 39 0 0 WR-NR  1000 0 768 1379 0 0 0 0	0.0 4.7  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8  0.8  0.0  0.0  0.0  49.3  5.0  8.2  0.0  41.7  13.7  0.0  0.3  0.0  0.3  0.0  0.0  164.5  21.1  0.0  0.0  0.0  12.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0	-1 4.0  0.0 0.0  -49.3 -5.0 -8.2 0.0 -41.7 -13.7 -4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0 0.0 -119.9  -21.1 0.0 0.3 -12.4 7.2 0.0 0.0 0.0
31 mport/F 32 mport/F 33 34 45 40 41 42 43 44 45 46 47 48 49 mport/F 50 51 52 53 53 54 55	220 kV Export of HVDC Export of HVDC 765 kV  400 kV  132kV Export of HVDC LINK 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-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 WARDHA-NIZAMBAD 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 S/C S/C S/C S/C S/C S/C S/C S	0 0 0 0 0 0 0 0 258 1910 433 367 967 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 289 12 39 0 0 WR-NR  1000 0 768 1379 0 0 0 0 0 0	0.0 4.7  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8  0.8  0.0  0.0  0.0  49.3  5.0  8.2  0.0  41.7  13.7  0.0  43.6  0.0  0.0  0.0  0.0  164.5  21.1  0.0  0.0  12.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0	-1 4.0  0.0 0.0  -49.3  -5.0 -8.2 0.0 -41.7 -13.7 -13.7 -13.7 -0.2 2.0 0.0 0.0 -119.9  -21.1 0.0 0.3 -12.4 7.2 0.0 0.0 0.0 -1.5
31 32 32 33 34 35 36 37 38 40 41 42 43 44 45 46 47 50 51 52 53 54 55 56	220 kV Export of HVDC Export of HVDC 765 kV  400 kV  132kV Export of HVDC LINK 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 RAPP-SHUALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 0 0 0 WR-NR  1000 0 768 1379 0 0 0 WR-SR	0.0 4.7  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8  0.8  0.0  0.0  0.0  49.3  5.0  41.7  13.7  0.0  43.6  0.0  0.0  0.3  0.0  0.0  164.5  21.1  0.0  0.0  12.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0	-1 4.0  0.0 0.0  -49.3 -5.0 -8.2 0.0 -41.7 -13.7 4.0 -43.6 8.8 6.1 22.9 -3 0.7 -0.2 2.0 0.0 0.0 -119.9  -21.1 0.0 0.3 -12.4 7.2 0.0 0.0 0.0
31 32 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 47 48 49 49 49 49 49 40 41 45 46 47 48 49	220 kV Export of HVDC Export of HVDC 765 kV  400 kV  132kV Export of HVDC LINK 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 RAPP-SHUALPUR BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR  WR (With SR) BHADRAWATI B/B BARSUR-L SILERU SOLAPUR-RAICHUR WARDHA-NIZAMABAD KOLHAPUR-KUDGI KOLHAPUR-CHIKODI PONDA-AMBEWADI XELDEM-AMBEWADI	D/C  D/C  D/C  D/C  D/C  D/C  D/C  S/C  S	0 0 0 0 0 0 0 0 0 258 1910 433 367 967 0 78 28 127 0 0	73 ER-NER  0 NER-NR  2106 250 307 0 1958 832 0 0 0 0 0 0 0 WR-NR  1000 0 768 1379 0 0 0 WR-SR	0.0 4.7  0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.8  0.8  0.0  0.0  0.0  49.3  5.0  8.2  0.0  41.7  13.7  0.0  43.6  0.0  0.0  0.0  0.0  164.5  21.1  0.0  0.0  12.4  0.0  0.0  0.0  0.0  0.0  0.0  0.0	-1 4.0  0.0 0.0  -49.3  -5.0 -8.2 0.0 -41.7 -13.7 -13.7 -13.7 -0.2 2.0 0.0 0.0 -119.9  -21.1 0.0 0.3 -12.4 7.2 0.0 0.0 0.0 -1.5