

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: 8th Feb 2019

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. 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 07.02.2019.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 07-फ़रवरी-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 07th February 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 8-Feb-19

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW) (at 1900 hrs; from RLDCs)	37224	46570	42665	18005	2454	146918
Peak Shortage (MW)	374	0	0	0	40	414
Energy Met (MU)	834	1081	974	366	43	3298
Hydro Gen (MU)	102	20	79	17	5	223
Wind Gen (MU)	16	83	35			134
Solar Gen (MU)*	19.94	23.16	67.36	0.78	0.04	111
Energy Shortage (MU)	7.2	0.4	0.0	0.0	0.3	7.9
Maximum Demand Met during the day	39568	53809	44739	18945	2510	154755
(MW) & time (from NLDC SCADA)	11:31	09:39	09:42	19:08	18:20	09:34

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	0.037	0.00	0.00	2.23	2.23	65.28	32.49

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	4492	0	92.4	35.9	-0.8	153	0.0
	Haryana	5921	0	129.7	69.8	-1.2	290	0.0
	Rajasthan	11612	0	226.4	62.5	-0.1	318	0.0
	Delhi	4013	0	68.7	63.4	-0.2	228	0.0
NR	UP	11152	0	221,2	84.4	-0.9	243	0.0
	Uttarakhand	2142	0	37.1	25.6	-0.2	157	0.0
	HP	1459	0	26.2	22.0	-1.5	65	0.3
	J&K	1521	380	29.2	33.3	-9.8	202	6.9
	Chandigarh	214	0	3.6	3.7	-0.1	17	0.0
	Chhattisgarh	3868	0	83.4	38.7	-0.6	530	0.4
	Gujarat	15026	0	320.1	62.8	2.5	809	0.0
	MP	11875	0	213.7	96.9	-0.9	659	0.0
WR	Maharashtra	20225	0	414.1	123.7	0.1	501	0.0
WK	Goa	498	0	12.3	11.5	0.2	38	0.0
	DD	325	0	7.3	7.4	-0.1	16	0.0
	DNH	790	0	18.5	18.3	0.2	43	0.0
	Essar steel	535	0	11.1	11.1	0.0	256	0.0
	Andhra Pradesh	8110	0	169.2	58.5	1.7	440	0.0
	Telangana	9019	0	187.4	77.1	0.2	491	0.0
SR	Karnataka	11563	0	223.3	84.3	0.7	482	0.0
311	Kerala	3740	0	74.9	57.7	0.7	224	0.0
	Tamil Nadu	14566	0	311.4	166.7	-0.4	492	0.0
	Pondy	375	0	7.4	7.4	0.0	57	0.0
	Bihar	4095	0	73.4	70.0	-0.9	460	0.0
	DVC	3085	0	64.5	-47.1	0.7	396	0.0
ER	Jharkhand	1098	0	23.6	17.8	-0.5	169	0.0
	Odisha	4040	0	73.6	25.3	1.1	267	0.0
	West Bengal	6937	0	129.6	30.3	0.2	309	0.0
	Sikkim	100	0	1.4	1.6	-0.2	18	0.0
	Arunachal Pradesh	118	3	2.2	2.2	-0.1	51	0.0
	Assam	1429	26	23.9	19.3	0.4	106	0.3
	Manipur	173	2	2.9	2.8	0.1	39	0.0
NER	Meghalaya	355	0	6.2	5.3	-0.1	34	0.0
	Mizoram	102	1	2.0	1.6	0.2	11	0.0
	Nagaland	126	2	2.1	1.9	0.1	24	0.0
	Tripura	221	0	3.8	1.9	0.2	46	0.0

$\textbf{D. Transnational Exchanges} \ \ (\textbf{MU}) \textbf{-} \textbf{Import} (+\textbf{ve}) / \textbf{Export} (-\textbf{ve})$

	Bhutan	Nepal	Bangladesh
Actual(MU)	0.1	-6.9	-16.8
Day peak (MW)	121.4	-307.0	-840.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	169.9	-218.3	120.2	-77.3	5.3	-0.2
Actual(MU)	150.7	-219.8	130.0	-76.7	7.2	-8.5
O/D/U/D(MU)	-19.1	-1.4	9.8	0.7	1.9	-8.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4424	15736	6202	1220	353	27935
State Sector	10445	14869	8080	3495	50	36939
Total	14869	30605	14282	4715	403	64874

G. Sourcewise generation (MU)

	NR	WR	SR	ER	NER	All India
Coal	479	1092	521	460	8	2560
Lignite	11	15	57	0	0	82
Hydro	102	20	79	17	5	223
Nuclear	18	31	31	0	0	81
Gas, Naptha & Diesel	19	35	18	0	27	99
RES (Wind, Solar, Biomass & Others)	65	108	145	1	0	318
Total	694	1301	851	478	40	3363
Share of RES in total generation (%)	9.40	8 28	17.00	0.17	0.10	9.47

Share of RES in total generation (%)	9.40	8.28	17.00	0.17	0.10	9.47
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation (%)	26.73	12.23	29.94	3.65	12.74	18.49

H. Diversity Factor
All India Demand Diversity Factor
1.031
Diversity factor = Sum of regional maximum demands / All India maximum demand

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

		INTE	R-REGIO	ONAL EX	CHANGES	Date of 1	Reporting :	8-Feb-19
								Import=(+ve) /Export =(-ve) for NET (MU)
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
Import/E	Export of	ER (With NR)						
1	765kV	GAYA-VARANASI	D/C	0	792	0.0	9.5	-9.5 5.1
3	/65KV	SASARAM-FATEHPUR GAYA-BALIA	S/C S/C	0	372 371	0.0	5.1 5.5	-5.1 -5.5
4	HVDC	ALIPURDUAR-AGRA	-	0	0	0.0	0.0	0.0
5	HVDC	PUSAULI B/B	S/C	0	149	0.0	3.6	-3.6
6		PUSAULI-VARANASI	S/C	0	114	0.0	2.1	-2.1
7 8		PUSAULI -ALLAHABAD MUZAFFARPUR-GORAKHPUR	S/C D/C	17	102 512	0.0	1.4 4.7	-1.4 -4.7
9	400 kV	PATNA-BALIA	Q/C	0	937	0.0	15.5	-15.5
10	1	BIHARSHARIFF-BALIA	D/C	0	356	0.0	4.3	-4.3
11	1	MOTIHARI-GORAKHPUR	D/C	0	339	0.0	6.9	-6.9
12		BIHARSHARIFF-VARANASI	D/C	52	301	0.0	2.4	-2.4
13	220 kV	PUSAULI-SAHUPURI	S/C	0	161	0.0	2.8	-2.8
14		SONE NAGAR-RIHAND	S/C	0 25	0	0.0	0.0	0.0
15 16	132 kV	GARWAH-RIHAND	S/C S/C	40	0	0.6	0.0	0.6
17	ĺ	KARMANASA-SAHUPURI KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
	Export of	ER (With WR)		-	ER-NR	1.2	63.9	-62.7
18		<u> </u>	D/C	1331	0	16.7	0.0	16.7
	765 kV	JHARSUGUDA-DHARAMJAIGARH S/C						
19 20		NEW RANCHI-DHARAMJAIGARH JHARSUGUDA-RAIGARH	D/C Q/C	314 9	592 461	0.0	1.9 5.8	-1.9 -5.8
21	400 kV	RANCHI-SIPAT	D/C	142	158	0.3	0.0	0.3
22	220 kV	BUDHIPADAR-RAIGARH	S/C	0	118	0.0	1.4	-1.4
23	220 K V	BUDHIPADAR-KORBA	D/C	158	0	1.9	0.0	1.9
					ER-WR	19.0	9.1	9.8
•	· •	ER (With SR)	D/C	0.0	2280.0	0.0	27.4	27.4
24 25	765 kV HVDC	ANGUL-SRIKAKULAM JEYPORE-GAZUWAKA B/B	D/C D/C	0.0	2289.0 685.0	0.0	37.4 16.0	-37.4 -16.0
26	LINK	TALCHER-KOLAR BIPOLE	D/C	17.0	1291.0	0.0	25.4	-25.4
27	400 kV	TALCHER-I/C	D/C	722.0	0.0	18.0	0.0	18.0
28	220 kV	BALIMELA-UPPER-SILERRU	S/C	1.0	0.0	0.0	0.0	0.0
					ER-SR	0.0	78.8	-78.8
Import/E	Export of	ER (With NER)	D/C	208	- 60	2.0	0.0	2
29	400 kV	BINAGURI-BONGAIGAON	D/C	208	60	2.9	0.0	3
30		ALIDEDDIAD RONGAIGAON	D/C		0	4.6	0.0	5
30	220 kV	ALIPURDUAR-BONGAIGAON ALIPURDUAR-SALAKATI	D/C D/C	297 64	0 18	4.6 0.8	0.0	5
	220 kV							1
31 Import/E	Export of	ALIPURDUAR-SALAKATI NER (With NR)		64	18 ER-NER	0.8 8.4	0.0	1 8.4
31	Export of	ALIPURDUAR-SALAKATI			18 ER-NER	0.8 8.4 16.3	0.0 0.0	1 8.4 16.3
31 Import/E 32	Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA		64	18 ER-NER	0.8 8.4	0.0	1 8.4
31 Import/E 32	Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR)		64	18 ER-NER 0 NER-NR	0.8 8.4 16.3	0.0 0.0	1 8.4 16.3
Import/E 32	Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR)	D/C	665	18 ER-NER	0.8 8.4 16.3 16.3	0.0 0.0 0.0 0.0	1 8.4 16.3 16.3
Import/F 32 Import/F 33	Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA	D/C - D/C	665	18	0.8 8.4 16.3 16.3	0.0 0.0 0.0 0.0 20.7	1 8.4 16.3 16.3 -20.7
31 Import/E 32 Import/E 33 34 35 36	Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL -MHG GWALIOR-AGRA	D/C D/C D/C D/C D/C D/C	64 665 0 240 0	18 ER-NER 0 NER-NR 1500 0 1923 1936	0.8 8.4 16.3 16.3 0.0 6.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4
31 Import/E 32 Import/E 33 34 35 36 37	Export of HVDC Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR	D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049	0.8 8.4 16.3 16.3 0.0 6.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5
31 Import/E 32 Import/E 33 34 35 36 37 38	Export of HVDC Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL 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	64 665 0 240 0 0 0 37	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624	0.8 8.4 16.3 16.3 0.0 6.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4
31 Import/E 32 Import/E 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 VCHAL B/B APL -MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI	D/C D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0 0 37 592	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 9.5	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0	1 8.4 16.3 16.3 16.3 -20.7 -6.0 -43.1 -32.4 -15.5 -11.4 9.5
31 Import/E 32 Import/E 33 34 35 36 37 38	Export of HVDC Export of HVDC	ALIPURDUAR-SALAKATI NER (With NR) BISWANATH CHARIALI-AGRA WR (With NR) CHAMPA-KURUKSHETRA VCHAL 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	64 665 0 240 0 0 0 37	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624	0.8 8.4 16.3 16.3 0.0 6.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40	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	D/C D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0 0 0 37 592 0	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189	0.8 8.4 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4 9.5 -22.6
31 Import/F 32 Import/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 SATNA-ORAI ZERDA-KANKROLI	D/C D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0 0 0 37 592 0 319	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/F 32 Import/F 33 34 35 36 37 38 39 40 41 42 43 44	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	D/C D/C D/C D/C D/C D/C D/C S/C S	64 0 240 0 0 0 0 37 592 0 319 183 962 239	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99	0.8 8.4 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45	Export of HVDC Export of HVDC 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-SHUJALPUR BADOD-KOTA	D/C D/C D/C D/C D/C D/C D/C S/C S	64 0 240 0 0 0 37 592 0 319 183 962 239 65	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25	0.8 8.4 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46	Export of HVDC Export of HVDC 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-SHUJALPUR BADOD-KOTA BADOD-MORAK	D/C D/C D/C D/C D/C D/C D/C S/C S	64 0 240 0 0 0 0 37 592 0 319 183 962 239 65 0	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25 132	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 17.4 0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 0.0 0.0 0.0 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 8.4 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4 9.5 -22.6 2.1 -1.5 17.4 0 -0.6 -1.5
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Export of HVDC Export of HVDC 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-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C D/C D/C D/C D/C D/C D/C S/C S	64 0 240 0 0 37 592 0 319 183 962 239 65 0 80	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25 132 0	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47	Export of HVDC Export of HVDC 765 kV 400 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-SHUJALPUR BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	D/C D/C D/C D/C D/C D/C D/C S/C S	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 80 62	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25 132 0 3	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.6 1.5 0.0	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4 9.5 -22.6 2.1 -1.5 17.4 0 -0.6 -1.5 0.8 0.4
31 Import/E 32 Import/E 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	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	64 0 240 0 0 37 592 0 319 183 962 239 65 0 80	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25 132 0	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E	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 SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND RAPP-SHUJALPUR BADOD-KOTA BADOD-KOTA BADOD-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 D/C	64 665 0 240 0 0 0 0 37 592 0 319 183 962 239 65 0 80 62 0	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25 132 0 3 0 WR-NR	0.8 8.4 16.3 16.3 16.3 0.0 0.0 0.0 0.0 0.0 0.0 17.4 0 0.0 0.0 0.0 0.0 36.8	0.0 0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50	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 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	D/C D/C D/C D/C D/C D/C D/C S/C S	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 0.0 0.0 0.0 0.0 0.0 17.4 0 0.0 0.0 0.8 0.4 0.0 36.8	0.0 0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.0 0.0 1.5 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 8.4 16.3 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4 9.5 -22.6 2.1 -1.5 17.4 0 -0.6 -1.5 0.8 0.4 0.0 -112.5
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E	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-KOTA BADOD-KOTA BADOD-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	64 665 0 240 0 0 0 0 37 592 0 319 183 962 239 65 0 80 62 0	18 ER-NER 0 NER-NR 1500 0 1923 1936 1049 624 0 1189 95 248 0 99 25 132 0 3 0 WR-NR	0.8 8.4 16.3 16.3 16.3 0.0 0.0 0.0 0.0 0.0 0.0 17.4 0 0.0 0.0 0.0 0.0 36.8	0.0 0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/F 32 Import/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51	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-KOTA BADOD-MORAK MEHGAON-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	64 665 0 240 0 0 0 0 37 592 0 319 183 962 239 65 0 80 62 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 9.5 0.0 17.4 0 0.0 0.8 0.4 0.0 36.8	0.0 0.0 0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 0.0 1.5 0.0 0.0 0.0 1.5 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/F 32 Import/F 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/F 50 51	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 VCHAL B/B APL-MHG GWALIOR-AGRA PHAGI-GWALIOR JABALPUR-ORAI GWALIOR-ORAI SATNA-ORAI ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -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	64 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 9.5 0.0 2.1 0.0 17.4 0 0.0 0.0 0.0 36.8	0.0 0.0 0.0 0.0 0.0 20.7 0.0 43.1 32.4 15.5 11.4 0.0 22.6 0.0 1.5 0.0 0.6 1.5 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53	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-KANKROLI ZERDA-BHINMAL VCHAL-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	D/C D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 80 62 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 9.5 0.0 17.4 0 0.0 0.8 0.4 0.0 36.8	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4 9.5 -22.6 2.1 -1.5 17.4 0 -0.6 -1.5 0.8 0.4 0.0 -112.5 -23.1 0.0 -38.6 -41.4
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56	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-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 KOLHAPUR-CHIKODI PONDA-AMBEWADI	D/C D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0 0 0 0 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 17.4 0.0 0.0 0.8 0.4 0.0 36.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55	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-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 D/C	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0 0.8 0.4 0.0 36.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56	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-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 D/C	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0 0 0 0 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 17.4 0.0 0.0 0.8 0.4 0.0 36.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56 57	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 SATNA-ORAI ZERDA-KANKROLI ZERDA-BHINMAL VCHAL -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 XEROMANIA ANDEWADI TRA	D/C D/C D/C D/C D/C D/C D/C D/C	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0 0 0 0 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0 0.8 0.4 0.0 36.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 -20.7 6.0 -43.1 -32.4 -15.5 -11.4 9.5 -22.6 2.1 -1.5 17.4 0 -0.6 -1.5 0.8 0.4 0.0 -112.5 -23.1 0.0 -38.6 -41.4 5.7 0.0 -1.5 1.1
31 Import/E 32 Import/E 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 Import/E 50 51 52 53 54 55 56	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-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 D/C	64 665 0 240 0 0 0 37 592 0 319 183 962 239 65 0 0 0 0 0 0 0 0 0 0 0 0 0	18	0.8 8.4 16.3 16.3 16.3 0.0 6.0 0.0 0.0 0.0 0.0 0.0 2.1 0.0 17.4 0 0.0 0.8 0.4 0.0 36.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 8.4 16.3 16.3 16.3 16.3 16.3 16.3 16.3 16.3