

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: 11th Sep 2020

Τo,

- 1. कार्यकारी निदेशक, पू.क्षे.भा .प्रे.के.,14, गोल्फ क्लब रोड, कोलकाता ७०००३३ 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 10.09.2020.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.-5.5.1 के प्रावधान के अनुसार, दिनांक 10-सितंबर-2020 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 10th September 2020, is available at the NLDC website.

धन्यवाद,

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



Report for previous day
A Dower Sunniv Pocition at All India and Regional level

	NR	WR	SR	ER	NER	TOTAL
Demand Met during Evening Peak hrs(MW) (at 2000 hrs; from RLDCs)	64254	45635	37025	22258	2887	172060
Peak Shortage (MW)	280	0	0	0	12	292
Energy Met (MU)	1400	1122	904	475	55	3956
Hydro Gen (MU)	327	79	92	144	19	661
Wind Gen (MU)	6	19	94	-	-	118
Solar Gen (MU)*	36.57	23.16	83.77	4.49	0.09	148
Energy Shortage (MU)	0.2	0.0	0.0	0.0	0.1	0.2
Maximum Demand Met During the Day (MW) (From NLDC SCADA)	64915	48934	43078	22543	2971	173500
Time Of Maximum Demand Met (From NLDC SCADA)	22:18	10:46	11:56	19:57	18:30	19:42

B. Frequency F	Offic (76)						
Region	FVI	< 49.7	49.7 - 49.8	49.8 - 49.9	< 49.9	49.9 - 50.05	> 50.05
All India	0.019	0.00	0.00	0.80	0.80	82.35	16.85

		Max.Demand	Shortage during	Energy Met	Drawal	OD(+)/UD(-)	Max OD	Energy
Region	States	Met during the day(MW)	maximum Demand(MW)	(MU)	Schedule (MU)	(MU)	(MW)	Shortag (MU)
	Punjab	11125	0	253.4	143.2	-2.2	0	0.0
	Harvana	9610	0	207.8	154.0	0.8	188	0.0
	Rajasthan	10375	0	226.8	83.9	0.5	396	0.0
	Delhi	5578	0	114.3	101.2	0.6	175	0.0
NR	UP	23483	0	471.9	222.4	0.7	687	0.0
	Uttarakhand	1959	0	43.4	20.8	0.2	69	0.2
	HP	1425	0	32.7	0.8	-0.1	181	0.0
	J&K(UT) & Ladakh(UT)	2310	0	43.7	24.8	1.0	402	0.0
	Chandigarh	306	0	6.0	6.0	0.1	27	0.0
	Chhattisgarh	3886	0	92.5	38.5	-1.4	239	0.0
	Gujarat	15685	0	342.6	76.5	1.0	550	0.0
	MP	10084	0	222.5	117.8	-1.4	545	0.0
WR	Maharashtra	18527	0	411.9	169.4	-3.7	535	0.0
	Goa	450	0	9.6	9.2	-0.2	35	0.0
	DD	314	0	7.0	7.0	0.0	27	0.0
	DNH	774	0	17.8	17.9	-0.1	54	0.0
	AMNSIL	802	0	17.8	2.8	0.8	289	0.0
	Andhra Pradesh	9043	0	189.2	76,7	1.9	681	0.0
	Telangana	11345	0	217.0	101.1	-1.0	610	0.0
SR	Karnataka	7717	0	155.3	54.5	0.5	529	0.0
	Kerala	3014	0	63.2	47.3	0.1	183	0.0
	Tamil Nadu	12822	0	272.2	113.5	-3.4	419	0.0
	Puducherry	360	0	7.5	8.0	-0.5	25	0.0
	Bihar	6189	0	119.7	114.6	-1.2	444	0.0
	DVC	3207	0	64.4	-47.2	0.9	211	0.0
	Jharkhand	1263	0	29.2	24.1	-1.0	0	0.0
ER	Odisha	4101	0	85.8	24.0	-0.5	227	0.0
	West Bengal	8094	0	174.8	54.6	0.0	100	0.0
	Sikkim	84	0	1.0	1.3	-0.2	10	0.0
	Arunachal Pradesh	113	1	2.3	2.1	0.2	51	0.0
	Assam	1889	23	35.7	32.4	-0.2	125	0.0
	Manipur	204	1	2.5	2.6	-0.1	22	0.0
NER	Meghalaya	318	0	5.7	0.6	0.1	34	0.0
	Mizoram	93	2	1.7	1.0	0.3	35	0.0
	Nagaland	127	2	2.4	2.5	-0.3	21	0.0
	Tripura	283	1	5.0	5.7	-0.1	43	0.0

D. Transnational Exchanges (MU) - Import(+ve)/Export(-ve)			
	Bhutan	Nepal	Bangladesh
Actual (MU)	52.4	-3.0	-25.8
Day Peak (MW)	2294.0	-306.2	-1120.0

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

	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	343.1	-343.6	111.4	-116.3	5.3	0.0
Actual(MU)	347.7	-338.6	100.0	-116.4	7.6	0.3
O/D/U/D(MU)	4.6	5.0	-11.4	-0.1	2.3	0.3

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	TOTAL
Central Sector	3502	10678	11002	1815	425	27423
State Sector	8179	17613	12732	5895	11	44430
Total	11681	28291	23734	7710	436	71852

G. Sourcewise generation (MU)

_	NR	WR	SR	ER	NER	All India
Coal	606	1226	405	467	9	2713
Lignite	25	10	24	0	0	59
Hydro	327	79	92	144	19	661
Nuclear	26	21	67	0	0	114
Gas, Naptha & Diesel	30	94	16	0	26	166
RES (Wind, Solar, Biomass & Others)	58	42	211	5	0	316
Total	1073	1471	814	616	54	4029
Share of RES in total generation (%)	5.43	2.87	25.87	0.74	0.17	7.84
Share of Non-fossil fuel (Hydro, Nuclear and RES) in total generation(%)	38.35	9.64	45,39	24.10	35.07	27.07

H. All India Demand Diversity Factor

ı	Based on Regional Max Demands	1.052
I	Based on State Max Demands	1.078
•	Di tion of the transfer of the transfer	

Diversity factor = Sum of regional or state maximum demands / All India maximum demand
*Source: RLDCs for solar connected to ISTS; SLDCs for embedded solar. Limited visibility of embedded solar data.

INTER-REGIONAL EXCHANGES

Import=(+ve) /Export =(-ve) for NET (MU)
Date of Reporting: 11-Sep-2020

Date of Reporting: Date of Reporting: Date of Report (MU) Export	11-Sep-2020 NET (MU) -24.9 0.0 -9.7 -0.5 -10.3 -1.1 -1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -3.0 0.0 0.0 0.0 0.0 -96.9 -15.5 -24.9 -1.3 -5.6 -6.6 -6.6 -6.1 -1.4 -3.0 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96
No.	-24.9 -0.0 -9.7 -0.5 -10.3 -1.1 -1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -3.0 -0.0 -0.0 -0.0 -0.0 -96.9 -15.5 -16.1 -1.4 -1.4 -1.4 -1.4 -1.4 -1.4 -1.4 -1
1	0.0 -9.7 -0.5 -10.3 -1.1 -1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -3.0 0.0 0.4 0.0 -96.9 -96.9 -11.5 -5.6 -0.4 -0.4 -0.4 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -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 -0.0 -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 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0
3 765 EV GAYA-VARANASI 2 0 555 0,0 9.7	-9.7 -0.5 -10.3 -1.1 -1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -3.0 -0.0 -0.0 -96.9 -15.5 -24.9 -1.3 -5.6 -0.4 -0.4 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0
4 765 kV SASARAM-FATEHPUR 1 103 216 0.0 0.5	-0.5 -10.3 -1.1 -1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -3.0 -0.0 -0.0 -96.9 -15.5 -24.9 -1.3 -5.6 -0.4 -0.4 -0.0 -0.0 -0.0 -0.0 -0.0 -0.0
S 765 kV GAYA-BALIA	-10.3 -1.1 -1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -1.3.0 -0.0 -0.0 -0.0 -0.0 -96.9 -15.5 -24.9 -1.3 -5.6 -0.4 -0.4 -0.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0 -3.0
To	1.2 -13.9 -19.8 -7.7 -6.1 -1.4 -3.0 -0.0 -0.0 -0.0 -96.9 -15.5 -24.9 -1.3 -5.6 -0.4 -0.4 -0.0 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -96.9 -9
8	-13.9 -19.8 -7.7 -6.1 -1.4 -3.0 -0.0 -0.0 -96.9 -96.9 -15.5 -24.9 -1.3 -6.6 -0.4 -6.7 -6.9 -8.9 -4.3.0 -6.9 -6.9 -6.9 -7.0 -7.0
9 400 kV PATNA-BALIA 4 0 1059 0.0 19.8 10 400 kV BHARSHARIFE-BALIA 2 0 447 0.0 7.7 11 400 kV MOTHERE-GORAKHPUR 2 0 327 0.0 6.1 12 400 kV MOTHERE-GORAKHPUR 2 0 327 0.0 6.1 12 400 kV BHARSHARIFE-VARANASI 2 67 2660 0.0 1.4 13 220 kV PUSAULI-SAHUPUR 1 0 154 0.0 3.0 14 132 kV SONE NAGAR-RHAND 1 0 0 0.0 0.0 15 132 kV GARWAH-RHAND 1 30 0 0.4 0.0 16 132 kV KARMANSA-SAHUPUR 1 0 0 44 0.0 0.0 17 132 kV KARMANSA-SAHUPUR 1 0 0 44 0.0 0.0 18 17 152 kV KARMANSA-SAHUPUR 1 0 0 44 0.0 0.0 19 17 132 kV KARMANSA-SAHUPUR 1 0 0 44 0.0 0.0 19 17 152 kV KARMANSA-GHANDAULI 1 0 44 0.0 0.0 0.0 19 19 15.5 98.5 10 765 kV JHARSUGUDA-DHARAMJAIGARH 4 919 0 15.5 0.0 2 765 kV JHARSUGUDA-DURG 2 168 89 1.3 0.0 4 400 kV JHARSUGUDA-PURG 2 168 89 1.3 0.0 5 400 kV RANCHI-SIPAT 2 490 0 7.6 0.0 6 220 kV BUDHIPADAR-RAIGARH 1 19 68 0.0 0.4 7 220 kV BUDHIPADAR-RAIGARH 1 19 68 0.0 0.4 1 HVDC JEYPORE-GAZUWAKA B/B 2 0 597 0.0 8.9 1 HVDC JEYPORE-GAZUWAKA B/B 2 0 597 0.0 8.9 1 HVDC JEYPORE-GAZUWAKA B/B 2 0 2274 0.0 36.9 1 HVDC JEYPORE-GAZUWAKA B/B 2 0 599 0.0 9.1 1 1 400 kV ALPURDUAR-BONGAIGAON 2 0 460 0.0 7.0 2 400 kV ALPURDUAR-BONGAIGAON 2 0 599 0.0 9.1 1 1 400 kV BINAGURI-BONGAIGAON 2 0 553 0.0 12.2 Import/Export of NER (With NR) 1 480 kV ALPURDUAR-BONGAIGAON 2 0 553 0.0 12.2 Import/Export of WR (With NR)	-19.8 -7.7 -6.1 -1.4 -3.0 -0.0 -0.0 -96.9 -15.5 -24.9 -1.3 -5.6 -0.4 -4.2 -5.8 -7.6 -0.9 -36.9 -11.4 -0.0 -36.9 -11.4 -0.0 -36.9 -11.4 -0.0 -38.8
11 400 kV MOTHBARI-GORAKHPUR 2 0 327 0.0 6.1 12 400 kV BHARSHARIFE-VARNASI 2 67 250 0.0 1.4 13 220 kV PUSAULI-SAHUPUR 1 0 154 0.0 3.0 14 132 kV SONE NAGAR-RHIAND 1 0 0 0 0.0 0.0 15 132 kV GARWAH-RHIAND 1 30 0 0.4 0.0 16 132 kV KARMANSA-SAHUPUR 1 0 0 0 0.0 0.0 17 132 kV KARMANSA-SAHUPUR 1 0 0 0 0.0 0.0 18 132 kV KARMANSA-SAHUPUR 1 0 0 0 0.0 0.0 19 10 12 kV KARMANSA-SAHUPUR 1 0 0 0 0.0 0.0 10 12 kV KARMANSA-GHANDAULI 1 0 44 0.0 0.0 0.0 17 132 kV KARMANSA-GHANDAULI 1 0 44 0.0 0.0 0.0 18 17 17 17 17 17 17 17	-6.1 -1.4 -3.0 0.0 0.4 0.0 -96.9 -15.5 -0.4 -0.2 -0.4 -0.4 -0.4 -0.4 -0.4 -0.4 -0.4 -0.4 -0.5 -0.4 -0.5 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -0.6 -
12	-1.4 -3.0 0.0 0.4 -0.0 0.0 0.0 0.0 -96,9 -15.5 -24.9 1.3 -5.6 -0.4 -0.4 -4.2 -58.7 -8.9 -43.0 -36.9 -11.4 -0.0 -88.8
13 220 kV PUSAULI-SAHUPURI 1 0 154 0.0 3.0 14 132 kV SOR NAGAR-RHAND 1 0 0 0.0 0.0 15 132 kV GARWAH-RHAND 1 0 0 0.4 0.0 16 132 kV KARMANASA-SAHUPURI 1 0 0 0.0 0.0 17 132 kV KARMANASA-CHANDAULI 1 0 44 0.0 0.0 Import/Export of ER (With WR) ER-NR 1.5 98.5 Import/Export of ER (With WR) ER-NR 1.5 98.5 Import/Export of ER (With WR) 1 10 15.5 0.0 2 765 kV HIARSUGUDA-DHARAMJAIGARH 4 919 0 15.5 0.0 3 765 kV HIARSUGUDA-DURG 2 168 89 1.3 0.0 4 400 kV HIARSUGUDA-RAIGARH 4 405 0 5.6 0.0 5 400 kV RANCHI-SIPAT 2 490 0 7.6 0.0 6 220 kV BUDHIPADAR-RAIGARH 1 19 68 0.0 0.4 7 220 kV BUDHIPADAR-RAIGARH 1 19 68 0.0 0.4 1 RVDC JEYPORE-GAZUWAKA B/B 2 0 597 0.0 8.9 2 HVDC JEYPORE-GAZUWAKA B/B 2 0 2274 0.0 36.9 4 400 kV BALLIMELA-UPPER-SILERRU 1 0 0.0 0.0 43.0 3 765 kV BALLIMELA-UPPER-SILERRU 1 1 0 0.0 0.0 0.0 1 HVDC BALCHER-KOLAR BIPOLE 2 0 599 0.0 9.1 3 220 kV BALLIMELA-UPPER-SILERRU 1 1 0 0.0 0.0 1 HVDC BESWANATH CHARIALI-AGRA 2 0 599 0.0 9.1 3 220 kV ALIPURDUAR-SALAKATI 2 0 148 0.0 2.5 Import/Export of NER (With NR) ER-NER 0.0 18.6 Import/Export of NER (With NR)	-3.0 0.0 0.4 0.0 0.0 -96.9 15.5 24.9 1.3 5.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -36.9
15 132 kV GARWAH-RIHAND	0.4 0.0 0.0 -96.9 15.5 24.9 1.3 5.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
16	0.0 0.0 0.0 -96.9 15.5 24.9 1.3 5.6 7.6 -0.4 4.2 58.7 -8.9 -43.0 -0.0 -11.4 0.0 -88.8
17 132 kV KARMANASA-CHANDAUL 1 0 44 0.0 0.0	0.0 -96.9 15.5 24.9 1.3 5.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
Import/Export of ER (With WR) 1	15.5 24.9 1.3 5.6 7.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 -0.0 -88.8
1 765 kV HIARSUGUDA-DHARAMJAIGARH 4 919 0 15.5 0.0	24.9 1.3 5.6 7.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
2 765 kV NEW RANCHI-DHARAMJAIGARH 2 1408 0 24.9 0.0	24.9 1.3 5.6 7.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
3 765 kV JHARSUGUDA-DURG 2 168 89 1.3 0.0 4 400 kV JHARSUGUDA-RAJGARH 4 405 0 5.6 0.0 5 400 kV RANCHI-SIPAT 2 490 0 7.6 0.0 6 220 kV BUDHIPADAR-RAJGARH 1 19 68 0.0 0.4 7 220 kV BUDHIPADAR-RAJGARH 1 19 68 0.0 0.4 8 7 220 kV BUDHIPADAR-RAJGARH 1 19 68 0.0 0.4 9 10 10 10 10 10 10 1 MUDC JEYPORE-GAZUWAKA B/B 2 0 597 0.0 8.9 1 HVDC JEYPORE-GAZUWAKA B/B 2 0 1891 0.0 43.0 3 765 kV ANGUL-SRIKAKULAM 2 0 1274 0.0 36.9 4 400 kV TALCHER-KOLAR BIPOLE 2 0 772 0.0 11.4 5 220 kV BALIMELA-UPPER-SILERRU 1 1 0 0.0 0.0 1 MIDDOCUENDOT OF ER (With NER) 1 400 kV BIALGURI-BONGAIGAON 2 0 599 0.0 9.1 3 220 kV ALIPURDUAR-BONGAIGAON 2 0 599 0.0 9.1 3 220 kV ALIPURDUAR-BONGAIGAON 2 0 599 0.0 9.1 3 220 kV ALIPURDUAR-BANGAIGAON 2 0 599 0.0 9.1 3 220 kV ALIPURDUAR-BANGAIGAON 2 0 599 0.0 9.1 3 220 kV ALIPURDUAR-BANGAIGAON 2 0 599 0.0 9.1 4 Import/Export of NER (With NR) ER-NER 0.0 12.2 4 Import/Export of WR (With NR)	1.3 5.6 7.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 -0.0 -88.8
4 400 kV JHARSUGUDA-RAIGARH 4 405 0 5.6 0.0 5 400 kV RANCHI-SIPAT 2 490 0 7.6 0.0 6 220 kV BUDHIPADAR-RAIGARH 1 19 68 0.0 0.4 7 220 kV BUDHIPADAR-RAIGARH 2 225 0 4.2 0.0 Import/Export of ER (With SR)	5.6 7.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 -0.0 -88.8
S	7.6 -0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
6 220 kV BUDHIPADAR-RAIGARH 1 19 68 0.0 0.4 7 220 kV BUDHIPADAR-RORBA 2 225 0 4.2 0.0 ER-WR 59.1 0.4 Import/Export of ER (With SR) 1 HVDC IFYDORE-GAZUWAKA B/B 2 0 597 0.0 8.9 2 HVDC TALCHER-KOLAR BIPOLE 2 0 1891 0.0 43.0 3 765 kV ANGUL-SRIKAKULAM 2 0 2274 0.0 36.9 4 400 kV TALCHER-I/C 2 0 772 0.0 11.4 5 220 kV BALIMELA-UPPER-SILERRU 1 1 0 0.0 88.8 Import/Export of ER (With NER) ER-SR 0.0 88.8 0.0 88.8 1 400 kV BALGAUB-BONGAIGAON 2 0 460 0.0 7.0 2 400 kV ALIPURDUAR-BONGAIGAON	-0.4 4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
T 220 kV BUDHIPADAR-KORBA 2 225 0 4.2 0.0	4.2 58.7 -8.9 -43.0 -36.9 -11.4 0.0 -88.8
Import/Export of ER (With SR) 1	-8.9 -43.0 -36.9 -11.4 0.0 -88.8
Import/Export of ER (With SR) 2 0 597 0.0 8.9 2 HVDC IEVPORE-GAZUWAKA B/B 2 0 1891 0.0 43.0 3 765 kV ANGUL-SRIKAKULAM 2 0 2274 0.0 36.9 4 400 kV TALCHER-KO 2 0 772 0.0 11.4 5 220 kV BALIMEIA-UPPER-SILERRU 1 1 0 0.0 0.0 6 1 4 4 4 4 4 4 4 4 4	-8.9 -43.0 -36.9 -11.4 0.0 -88.8
2	-43.0 -36.9 -11.4 0.0 -88.8
3 765 kV ANGUL-SRIKAKULAM 2 0 2274 0.0 36,9 4 400 kV TALCHER-I/C 2 0 772 0.0 11.4 5 220 kV BALIMELA-UPPER-SILERRU 1 1 0 0.0 0.0	-36.9 -11.4 0.0 -88.8
4 400 kV TALCHER-I/C 2 0 7772 0.0 11.4 5 220 kV BALIMELA-UPPER-SILERRU 1 1 0 0.0 0.0	-11.4 0.0 -88.8 -7.0
ER-SR 0,0 88,8	-88.8 -7.0
Import/Export of ER (With NER) 1 400 kV BINAGURI-BONGAIGAON 2 0 460 0.0 7.0	-7.0
1 400 kV BINAGURI-BONGAIGAON 2 0 460 0.0 7.0	
3 220 kV ALIPURDUAR-SALAKATI 2 0 148 0.0 2.5	0 1
ER-NER 0,0 18,6	
Import/Export of NER (With NR) 1	-2.5 -18.6
NER-NR 0.0 12.2	-10.0
Import/Export of WR (With NR)	-12.2
1 HVDC CHAMPA-KIIDIKSHETDA 2 1 1250 0.0 40.2	-12.2
	-48.2
2 HVDC VINDHYACHAL B/B - 227 54 2.9 0.2	2.7
3 HVDC MUNDRA-MOHINDERGARH 2 0 1919 0.0 39.9	-39.9
4 765 kV GWALIOR-AGRA 2 0 2819 0.0 51.7 5 765 kV PHAGI-GWALIOR 2 0 1312 0.0 23.9	-51.7 -23.9
3 705 KY 1160A-SYMALAYN 2 0 1312 0.0 23.7 6 765 KV JABALPUR-ORAL 2 0 1336 0.0 45.0	-23.9 -45.0
7 765 kV GWALIOR-ORAI 1 442 0 9.0 0.0	9.0
8 765.8V SATNA-ORAI 1 0 1537 0.0 32.7	-32.7
9 765 kV CHITORGARH-BANASKANTHA 2 0 1123 0.0 16.4 10 400 kV ZERDA-KANKROLI 1 14 214 0.0 2.2	-16.4 -2.2
11 400 kV ZERDA -BHINMAL 1 7 334 0.0 2.9	-2.9
12 400 kV VINDHYACHAL RHAND 1 971 0 22.6 0.0	22.6
13 400 kV RAPP-SHUJALPUR 2 0 515 0.0 7.0 14 220 kV BHANPURA-RANPUR 1 11 0 0.0 2.1	-7.0 -2.1
14 220 kV BHAYPURA-BANYOR 1 11 0 0.0 2.1 15 220 kV BHAYPURA-MORAK 1 0 145 0.0 2.5	-2.1 -2.5
16 220 kV MEHGAON-AURAIYA 1 92 9 0.2 0.3	-0.1
17 220 kV MALANPUR-AURAIYA 1 50 41 0.8 0.0	0.8
18 132 kV GWALIOR-SAWAI MADHOPUR 1 0 0 0.0 0.0 19 132 kV RAJGHAT-LALITPUR 2 0 0 0.0 0.0	0.0
WR-NR 35.5 274.9	-239.4
Import/Export of WR (With SR)	
1 HVDC BHADRAWATI B/B - 0 488 0.0 9.7 2 HVDC RAIGARH-PUGALUR 2 0 997 0.0 15.1	-9.7 -15.1
3 765 kV SOLAPUR-RAICHUR 2 1279 1107 0.0 2.8	-2.8
4 765 kV WARDHA-NIZAMABAD 2 0 2241 0.0 30.3	-30.3
5 400 kV KOLHAPUR-KUDGI 2 781 0 11,2 0.0 6 220 kV KOLHAPUR-CHIKODI 2 0 0 0.0 0.0	11.2 0.0
7 220 kV PONDA-AMBEWADI 1 0 0 0.0 0.0	0.0
8 220 kV XELDEM-AMBEWADI 1 0 76 1.5 0.0	1.5
WR-SR 12.7 57.9	-45.1
INTERNATIONAL EXCHANGES F	
State Region Line Name Max (MW) Min (MW) Avg (MW)	nergy Evolu-
400kV MANGDECHHU-ALIPURDUAR 1&2	Cnergy Exchang
	(MI)
ER i.e. ALIPURDUAR RECEIPT (from 773 0 728	
ER i.e. ALIPURDUAR RECEIPT (from 773 0 728 MANGDECHU HEP 4*180MW)	(MI)
ER	(MI)
ER	(MU) 17.5
ER	(MU) 17.5 24.8
ER	(MU) 17.5
ER Le. ALPURDUAR RECEIPT (from 773 0 728 MANGDECH HEP 4* 1960MV) 773 0 728 MANGDECH HEP 4* 1960MV) 773 0 728 MANGDECH HEP 4* 1960MV) 773 0 728 MANGDECH HEP 4* 1960MV 773 0 728 MANGDECH HEP 4* 1960MV 773 0 728 MANGDECH HEP (4* 1970MV) 773 MANGDECH HEP (4* 1970MV) 774 MANGDECH HEP (4* 1970MV) 775 MANGDECH HEP 4* 1970MV	(MU) 17.5 24.8 7.8
ER Le. ALPURDUAR RECEIPT (from 773 0 728 MAJABASE BIRARA) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904) (1904)	(MU) 17.5 24.8
ER	7.8 -1.2
ER Le. ALPURDUAR RECEIPT (from 773 0 728 MANGDECH HEP 4* 1960MV) 773 0 728 MANGDECH HEP 4* 1960MV) 773 0 728 MANGDECH HEP 4* 1960MV) 773 0 728 MANGDECH HEP 4* 1960MV 773 0 728 MANGDECH HEP 4* 1960MV 773 0 728 MANGDECH HEP (4* 1970MV) 773 MANGDECH HEP (4* 1970MV) 774 MANGDECH HEP (4* 1970MV) 775 MANGDECH HEP 4* 1970MV	(MU) 17.5 24.8 7.8
ER	(MII) 17.5 24.8 7.8 -1.2
ER	7.8 -1.2
ER Le. ALIPURDUAR RECEIPT (from MANG DECHU HEF # 1800MV)	(MII) 17.5 24.8 7.8 -1.2
ER Le. ALPURDUAR RECEIPT (from 773 0 728 MANGDECHU HEF 4* 1890MV) 773 0 728 MANGDECHU HEF 4* 1890MV) 773 0 728 MANGDECHU HEF 4* 1890MV) 773 100 728 MALBASE BINAGURI 1,2.4 (8, 400KV MALBASE BINAGURI 1,2.4 (8, 400KV MALBASE BINAGURI 1,2.4 (8, 200KV MALBASE BINAGURI ALLA HEF (6*) 190MW) 220KV CHIVKHA-BIRP ARA 1,8.2 (8, 220KV MALBASE BIRPARA 1,8.2 (8,	(MII) 17.5 24.8 7.8 -1.2
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7 -0.4 -1.9
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7 -0.4 -1.9 -22.3
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7 -0.4 -1.9
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7 -0.4 -1.9 -22.3
ER	(MII) 17.5 24.8 7.8 -1.2 -1.1 -0.7 -0.4 -1.9 -22.3