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

## राष्ट्राय भार प्रथण कद्र, नइ दिल्ला Date of Reporting 25-Feb-14

## Report for previous day A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW)	35777	36428	33086	14896	1761	121948
Peak Shortage (MW)	1223	200	1803	100	269	3595
Energy Met (MU)	761	846	788	291	32	2718
Hydro Gen(MU)	108	57	83	21	3	272
Wind Gen(MU)	12	36	24			72

## B. Frequency Profile (%)

Region	<49.2	<49.7	49.7-49.8	49.8-49.9	<49.9	49.9-50.05	> 50.05
NEW GRID	0.0	0.0	0.0	1.2	1.3	19.2	79.6
SR GRID	0.0	0.0	0.0	1.2	1.3	19.2	79.6

NEW and SR grid running in synchronisation.

C.Power Supply Position in States

RegionRegion	States	Max. Demand Met during the day	Peak hour	Energy	Drawal	OD(+)/	Max
RegionRegion	States	(MW)	Shortage (MW)	Met (MU)	Schedule (MU)	UD(-) (MU)	OD (MW)
	Punjab	5059	0	93.2	41.0	0.6	260
	Haryana	5695	0	104.4	57.6	-0.5	350
	Rajasthan	9284	0	188.1	78.4	-1.2	140
	Delhi	3462	13	59.9	42.5	-1.2	313
NR	UP	9974	1110	216.7	91.3	-1.1	289
	Uttarakhand	1703	0	32.5	22.8	8.0	181
	HP	1281	0	23.5	17.9	0.2	90
	J&K	1862	100	39.3	33.4	0.0	110
	Chandigarh	194	0	3.4	3.4	0.0	28
	Chhattisgarh	2922	24	58.4	8.2	-0.8	357
	Gujarat	10980	14	238.0	46.7	-0.2	508
	MP	7266	2	142.3	64.3	0.0	493
MD	Maharashtra	17638	159	368.6	115.0	1.3	581
WR	Goa	410	0	8.1	4.1	3.2	96
	DD	234	0	5.8	2.8	3.0	32
	DNH	620	0	14.5	7.4	7.2	38
	Essar steel	487	0	10.1	10.1	0.1	37
	Andhra Pradesh	12671	500	272.1	91.7	4.8	595
	Karnataka	8955	400	191.3	20.6	0.7	443
SR	Kerala	3320	150	61.6	28.5	1.3	238
	Tamil Nadu	11881	753	257.2	85.8	3.7	344
	Pondy	293	0	5.5	5.8	-0.2	34
	Bihar	1900	100	40.2	38.3	1.2	195
	DVC	2509	0	57.0	-18.6	-2.2	305
ER	Jharkhand	959	0	20.3	11.0	-0.5	85
EN	Odisha	3522	0	62.9	8.7	-0.1	335
	West Bengal	6238	0	109.2	20.7	2.1	385
	Sikkim	92	0	1.5	1.3	0.2	45
	Arunachal Pradesh	111	4	1.7	1.3	0.4	41
	Assam	962	196	19.0	12.5	1.8	107
	Manipur	109	5	1.7	1.5	0.2	42
NER	Meghalaya	241	18	4.3	3.5	0.0	44
	Mizoram	68	8	1.0	0.9	-0.1	22
	Nagaland	94	8	1.4	1.6	-0.5	21
	Tripura	198	0	2.5	0.7	-0.2	23

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	1.8	-2.7	-11.5
Max MW		-137.0	-479.0

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

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	NR	WR	SR	ER	NER
Schedule(MU)	126.8	-104.8	28.1	-56.8	5.6
Actual(MU)	118.4	-110.2	32.3	-51.5	7.5
O/D/U/D(MU)	-8.4	-54	4.2	53	19

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	3186	4180	1250	1470	445	10531
State Sector	6675	11717	1890	4749	110	25141
Total	9861	15897	3140	6219	555	35672

सचिव(ऊर्जा)/ विशेष सचिव(ऊर्जा)/अतिरिक्त सचिव(ऊर्जा)/संयुक्त सचिव(पारेषण)/(ओ एम)/निदेशक(ओ एम)/मुख्य अभियंता-के०वि॰प्रा॰(ग्रि॰प्र॰)/ अध्यक्ष एवं प्रबंध निदेशक (पावरग्रिङ)/मुख्य कार्यपालक अधिकारी(पोसोको)/सभी राज्यो के मुख्य सचिव/ऊर्जा सचिव

		<u>INTER-E</u>	REGIONA	L EXCH	ANGES	Date of R	Reporting:	25-Feb-1
	_					Import=(	+ve) /Export	=(-ve)
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
[mport/]	Export of	ER (With NR)	•					
1	765KV	GAYA-FATEHPUR	S/C	178	-173	0	-0.5	-0.5
2	703K V	SASARAM-FATEHPUR	D/C	0	0	0	-1.5	-1.5
3	HVDC LINK	PUSAULI B/B	S/C	0	0	0	-7	-7
4	1	PUSAULI-SARNATH	S/C	0	-192	0	0	0
5	1	PUSAULI -ALLAHABAD	D/C	0	-177	0	0	0
6	400 KV	MUZAFFARPUR-GORAKHPUR	D/C	153	-326	0	-3.4	-3.4
7	<u> </u>	PATNA-BALIA	D/C	0	-333	0	-11.3	-11.3
8	1	BIHARSHARIFF-BALIA	S/C	0	-447	0	-7	-7.5
9		PUSAULI-BALIA	D/C	114	-3	1	0	1
10	220 KV	PUSAULI-SAHUPURI	S/C	0	-156	0	-2.9	-2.9
11	+	SONE NAGAR-RIHAND	S/C	0	0	0	0	0
12	132 KV	GARWAH-RIHAND	S/C	26	0	1	0	0.6
13	4	KARMANASA-SAHUPURI	S/C	1	0	0	0	0
14		KARMANASA-CHANDAULI	S/C	0	0 ER-NR	0 2	0	-32.3
mport/	Export of	ER (With WR)			EK-NK	2	-34.1	-32.3
15		JHARSUGUDA-RAIGARH	D/C	455	-236	2.1	0	2.1
16	400 KV	STERLITE-RAIGARH	D/C	59	-166	0	-3.1	-3.1
17	Ī	RANCHI-SIPAT	D/C	545	-176	2	0.0	2.3
18	220 KV	BUDHIPADAR-RAIGARH	S/C	0	-169	0	-2.6	-2.6
19	220 KV	BUDHIPADAR-KORBA	D/C	65	-64	0	0	-0.3
					ER-WR	4.4	-6.0	-1.6
_	Export of	ER (With SR)		1	1		1	
20	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	-797	0	-20.0	-20.0
21	LINK	TALCHER-KOLAR BIPOLE	D/C	0	-1775	0	-35.5	-35.5
22	400 KV	TALCHER-I/C		900	0	11	0.0	10.9
23	220 KV	BALIMELA-UPPER-SILERRU	S/C	0	0 ER-SR	0 11	-20.0	-9.1
mport/	Export of	ER (With NER)			EK-5K	- 11	-20.0	-9.1
24	400 KV	BINAGURI-BONGAIGAON	D/C	0	-486	0	-6.5	-6.5
	220 Y/Y/							
25	220 KV	BIRPARA-SALAKATI	D/C	0	-104	0	-1.4	-1.4
25	220 KV		_	0	-104 ER-NER	0		-1.4 - <b>7.9</b>
	ı		_	0			-1.4	
	ı	BIRPARA-SALAKATI	_	0			-1.4	
26 27	Export of HVDC 765 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA	D/C D/C D/C	0 0	-500 -1918	0 0	-1.4 -7.9 -10 -35.4	- <b>7.9</b> -9.7 -35.4
26 27 28	Export of HVDC 765 KV 400 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI	D/C D/C D/C S/C	0 0 323	-500 -1918 -59	0 0 0 2.6	-1.4 -7.9 -10 -35.4 0	-7.9 -9.7 -35.4 2.6
26 27 28 29	Export of HVDC 765 KV 400 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL	D/C D/C D/C S/C S/C	0 0 323 22	-500 -1918 -59 -262	0 0 0 2.6 0.0	-1.4 -7.9 -10 -35.4 0 -1	-7.9 -9.7 -35.4 2.6 -0.5
26 27 28 29 30	Export of HVDC 765 KV 400 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA	D/C D/C D/C S/C S/C S/C	0 0 323 22 96	-500 -1918 -59 -262 -13	0 0 2.6 0.0 1.0	-1.4 -7.9 -10 -35.4 0 -1	-7.9 -9.7 -35.4 2.6 -0.5 1.0
26 27 28 29 30 31	Export of HVDC 765 KV 400 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK	D/C  D/C  D/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55	-500 -1918 -59 -262 -13 -50	0 0 2.6 0.0 1.0	-1.4 -7.9 -10 -35.4 0 -1 0	-9.7 -35.4 2.6 -0.5 1.0
26 27 28 29 30 31 32	Export of HVDC 765 KV 400 KV 400 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61	-500 -1918 -59 -262 -13 -50 0	0 0 2.6 0.0 1.0 0.3	-1.4 -7.9 -10 -35.4 0 -1 0 0	-7.9 -9.7 -35.4 2.6 -0.5 1.0 0.0 1.1
26 27 28 29 30 31 32 33	Export of	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29	-500 -1918 -59 -262 -13 -50 0	0 0 0 2.6 0.0 1.0 0.3 1.1	-1.4 -7.9 -10 -35.4 0 -1 0 0 0	-7.9 -9.7 -35.4 2.6 -0.5 1.0 0.0 1.1 0.5
26 27 28 29 30 31 32	Export of HVDC 765 KV 400 KV 400 KV	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61	-500 -1918 -59 -262 -13 -50 0 0	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5	-1.4 -7.9 -10 -35.4 0 -1 0 0 0 0	-9.7 -9.7 -35.4 2.6 -0.5 1.0 0.0 1.1 0.5 0
26 27 28 29 30 31 32 33 34	Export of HVDC 765 KV 400 KV 400 KV 220 KV	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29	-500 -1918 -59 -262 -13 -50 0 0 WR-NR	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0	-1.4 -7.9 -10 -35.4 0 -1 0 0 0 0 0 0 -45.9	-9.7 -9.7 -35.4 2.6 -0.5 1.0 0.0 1.1 0.5 0
26 27 28 29 30 31 32 33 34	Export of	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29	-500 -1918 -59 -262 -13 -50 0 0	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5	-1.4 -7.9 -10 -35.4 0 -1 0 0 0 0	-9.7 -9.7 -35.4 2.6 -0.5 1.0 0.0 1.1 0.5 0
26 27 28 29 30 31 32 33 34	Export of	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29	-500 -1918 -59 -262 -13 -50 0 0 WR-NR	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0	-1.4 -7.9 -10 -35.4 0 -1 0 0 0 0 0 0 -45.9	-9.7 -9.7 -35.4 2.6 -0.5 1.0 0.0 1.1 0.5 0 -40.4
mport/1 26 27 28 29 30 31 32 33 34 35	Export of	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000	0 0 2.6 0.0 1.0 0.3 1.1 0.5 0	-1.4 -7.9 -10 -35.4 0 -1 0 0 0 0 0 0 -45.9 -46.6	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6
26 27 28 29 30 31 32 33 34 35 <b>mport/</b> 3	Export of	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5	-1.4 -7.9 -10 -35.4 0 -1 0 0 0 0 0 -45.9 -46.6	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6
mport/l 26 27 28 29 30 31 32 33 34 35 mport/l 36 37	Export of HVDC 765 KV 400 KV 400 KV 220 KV  132KV  HVDC Export of HVDC LINK	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B  BARSUR-L.SILERU	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5 0	-1.4 -7.9 -10 -35.4 0 0 0 0 0 0 0 -45.9 -46.6	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6
35 mport/J 36 27 28 29 30 31 32 33 34 35 mport/J 36 37 38	Export of HVDC 765 KV 400 KV 400 KV 220 KV  132KV  HVDC Export of HVDC LINK	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B  BARSUR-L.SILERU  SOLAPUR-RAICHUR  KOLHAPUR-CHIKODI	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000 -1000 0 -539	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5 0	-1.4 -7.9  -10 -35.4 0 -1 0 0 0 0 0 -45.9 -46.6	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6
26 27 28 29 30 31 32 33 34 35 (mport/) 36 37 38 39	Export of	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B  BARSUR-L.SILERU  SOLAPUR-RAICHUR  KOLHAPUR-CHIKODI	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000 -1000 0 -539	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5 0	-1.4 -7.9  -10 -35.4 0 -1 0 0 0 0 0 -45.9 -46.6	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6  -24  0.0  -0.7  0.0
mport/l 26 27 28 29 30 31 32 33 34 35 mport/l 36 37 38 39 40	Export of	BIRPARA-SALAKATI  WR (With NR)  V'CHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B  BARSUR-L.SILERU  SOLAPUR-RAICHUR  KOLHAPUR-CHIKODI  PONDA-AMBEWADI	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000 -1000 0 -539 0 0	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5 0	-1.4 -7.9  -10 -35.4 0 -1 0 0 0 0 0 -45.9 -46.6  -23.7 0 0.0 0 0	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6  -24  0.0  -0.7  0.0  0.0
mport/1 26 27 28 29 30 31 32 33 34 35 mport/1 36 37 38 39 40 41	Export of	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B  BARSUR-L.SILERU  SOLAPUR-RAICHUR  KOLHAPUR-CHIKODI  PONDA-AMBEWADI  XELDEM-AMBEWADI	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0 0 0 0 319 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000 -1000 0 -539 0 0 WR-SR	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5 0	-1.4 -7.9  -10 -35.4 0 -1 0 0 0 0 0 -45.9 -46.6  -23.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6  -24  0.0  -0.7  0.0  0.0  2.2
mport/l 26 27 28 29 30 31 32 33 34 35 mport/l 36 37 38 39 40	Export of	BIRPARA-SALAKATI  WR (With NR)  VCHAL B/B  GWALIOR-AGRA  ZERDA-KANKROLI  ZERDA -BHINMAL  BADOD-KOTA  BADOD-MORAK  MEHGAON-AURAIYA  MALANPUR-AURAIYA  GWALIOR-SAWAI MADHOPUR  APL -MHG  WR (With SR)  BHADRAWATI B/B  BARSUR-L.SILERU  SOLAPUR-RAICHUR  KOLHAPUR-CHIKODI  PONDA-AMBEWADI  XELDEM-AMBEWADI	D/C  D/C  D/C  S/C  S/C  S/C  S/C  S/C	0 0 323 22 96 55 61 29 0 0 0 0 319 0	-500 -1918 -59 -262 -13 -50 0 0 WR-NR -2000 -1000 0 -539 0 0 WR-SR	0 0 0 2.6 0.0 1.0 0.3 1.1 0.5 0 5.5 0	-1.4 -7.9  -10 -35.4 0 -1 0 0 0 0 0 -45.9 -46.6  -23.7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-7.9  -9.7  -35.4  2.6  -0.5  1.0  0.0  1.1  0.5  0  -40.4  -46.6  -24  0.0  -0.7  0.0  0.0  2.2