

National Load Despatch Centre पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

POWER SYSTEM OPERATION CORPORATION LIMITED

(A wholly owned subsidiary of POWERGRID) B-9, QUTUB INSTITUTIONAL AREA, KATWARIA SARAI, NEW DELHI -110016

Date: 08th Sep, 2015

Ref: POSOCO/NLDC/SO/Daily PSP Report

To,

- 1. महाप्रबंधक, पू. क्षे. भा. प्रे. के., 14, गोल्फ क्लब रोड , कोलकाता 700033 General Manager, 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. महाप्रबंधक, प. क्षे. भा. प्रे. के., एफ-3, एम आई डी सी क्षेत्र , अंधेरी, मुंबई 400093 General Manager, WRLDC, F-3, M.I.D.C. Area, Marol, Andheri (East), Mumbai-400093
- 4. महाप्रबंधक, ऊ. पू. क्षे. भा. प्रे. के., डोंगतिएह, लोअर नोंग्रह , लापलंग, शिलोंग 793006 General Manager, NERLDC, Dongteih, Lower Nongrah, Lapalang, Shillong - 793006, Meghalaya
- 5. कार्यपालक निदेशक, द. क्षे. भा. प्रे. के., 29, रेस कोर्स क्रॉस रोड, बंगल्र 560009 Executive Director, SRLDC, 29, Race Course Cross Road, Bangalore-560009

Sub: Daily PSP Report for the date 07.09.2015.

महोदय/Dear Sir,

आई॰ई॰जी॰सी॰-2010 की धारा स.- 5.5.1 के प्रावधान के अनुसार, दिनांक 7th Sep 2015 की अखिल भारतीय प्रणाली की दैनिक ग्रिड निष्पादन रिपोर्ट रा॰भा॰प्रे॰के॰ की वेबसाइट पर निम्न लिंक 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 7th Sep 2015, is available at the NLDC website.

http://posoco.in/attachments/article/94/08.09.15 NLDC PSP.pdf

Thanking You.

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

Report for previous day Date of Reporting 8-Sep-15

A. Maximum Demand

	NR	WR	SR	ER	NER	Total
Demand Met during Evening Peak hrs(MW)	49530	44939	31130	17235	2058	144892
Peak Shortage (MW)	2696	624	2400	714	337	6771
Energy Met (MU)	1107	1033	723	367	41	3270
Hydro Gen(MU)	287	50	64	80	25	506
Wind Gen(MU)	9	22	25			56

B. Frequency Profile (%)

Diffrequency Frome ()	- 0)						
Region	<49.2	<49.7	49.7-49.8	49.8-49.9	<49.9	49.9-50.05	> 50.05
NEW GRID	0.00	0.81	10.79	35.82	47.42	50.19	2.40
SR GRID	0.00	0.80	10.80	35.80	47.40	50.20	2.40

C.Power Supply Position in States

		Max. Demand	Shortage during	Energy	Drawal	OD(+)/	Max	
RegionRegion	States	Met during the	maximum Demand	Met (MU)	Schedule (MU)	UD(-) (MU)	OD (MW)	
		day (MW)	(MW)	Met (Me)	Benedule (MC)	CD(-) (MC)	· ·	
	Punjab	9994	0	215.7	94.9	-1.3	36	
	Haryana	8764	0	180.5	123.2	-1.1	150	
	Rajasthan	10619	0	231.2	73.2	0.3	189	
NR	Delhi	4994	60	101.3	82.1	-1.4	125	
	UP	11140	4775	272.9	120.5	2.6	485	
	Uttarakhand	1763	145	37.3	16.0	2.0	199	
	HP	1255	0	25.4	5.4	1.5	224	
	J&K	1944	486	36.9	18.3	1.4	319	
	Chandigarh	289	0	5.8	6.1	0.3	1	
	Chhattisgarh	3538	132	85.1	31.8	0.0	348	
	Gujarat	14302	0	315.3	68.6	-3.1	392	
	MP	8237	0	186.2	97.4	-3.4	148	
WR	Maharashtra	19059	360	410.9	118.3	-0.4	431	
VVIN	Goa	437	0	9.0	8.2	0.7	47	
	DD	294	0	6.5	6.4	0.1	32	
	DNH	719	0	16.3	16.2	0.1	44	
	Essar steel	167	0	3.2	2.8	0.4	118	
	Andhra Pradesh	5820	0	118.8	20.8	-3.2	407	
	Telangana	6201	0	139.0	93.8	-3.9	233	
SR	Karnataka	6200	1800	132.9	15.6	3.3	500	
Sit	Kerala	3304	200	60.3	29.5	1.6	293	
	Tamil Nadu	12382	0	265.0	90.0	2.0	477	
	Pondy	322	0	6.6	6.8	-0.1	30	
	Bihar	3113	200	64.9	64.3	-1.2	0	
	DVC	2578	0	60.5	-14.8	-2.9	0	
ER	Jharkhand	1115	100	20.1	14.1	1.1	0	
	Odisha	3454	300	67.5	14.8	1.6	0	
	West Bengal	7248	24	152.1	58.5	1.7	0	
	Sikkim	116	0	1.4	0.9	0.5	0	
	Arunachal Pradesh	109	1	1.3	1.8	-0.5	33	
	Assam	1232	230	25.1	16.3	2.1	184	
	Manipur	126	4	2.1	2.1	0.0	41	
NER	Meghalaya	270	5	5.8	-0.5	-0.3	70	
	Mizoram	69	1	1.1	1.3	-0.2	5	
	Nagaland	103	2	1.6	1.6	-0.1	14	
	Tripura	226	14	3.5	0.8	0.8	100	

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

	Bhutan	Nepal	Bangladesh
Actual(MU)	34.6	-3.3	-10.9
Max MW		-170.0	-459.0

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

zvimporwenpore z j regions (m me) impor	t(: re)/ Emport(re)	, 02(:), 02()				
	NR	WR	SR	ER	NER	TOTAL
Schedule(MU)	173.3	-165.2	46.3	-43.7	-6.2	4.5
Actual(MU)	182.5	-182.3	45.0	-40.4	-5.3	-0.5
O/D/U/D(MU)	9.2	-17 1	-13	3.3	0.9	-5.0

F. Generation Outage(MW)

	NR	WR	SR	ER	NER	Total
Central Sector	4845	12677	3960	2995	392	24869
State Sector	5045	9936	6162	5679	110	26932
Total	9890	22613	10122	8674	501	51801

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

8		<u>INTER-REC</u>	NGES	Date of R	8-Sep-15			
						Import=(=(-ve)	
Sl No	Voltage Level	Line Details	Circuit	Max Import (MW)	Max Export (MW)	Import (MU)	Export (MU)	NET (MU)
mport/l	Export of	ER (With NR)			•			
1		GAYA-FATEHPUR	S/C	0	-343	0.0	-4.6	-4.6
	765KV	GAYA-BALIA	S/C	0	0	0.0	-1.4	-1.4
2		SASARAM-FATEHPUR	S/C	0	0	0.0	-2.2	-2.2
3	HVDC LINK	PUSAULI B/B	S/C	0	0	0	-9	-9
4		PUSAULI-SARNATH	S/C	0	-239	0	0	0
5		PUSAULI -ALLAHABAD	D/C	0	-199	0	0	0
6	400 KV	MUZAFFARPUR-GORAKHPUR	D/C	0	-590	0	-10	-10
7 8	_	PATNA-BALIA BIHARSHARIFF-BALIA	Q/C D/C	0	-234 -355	0	-6 -5	-6 -5
0	-	BARH-GORAKHPUR	D/C D/C	0	-333	0	-3	-3 -4
10	220 KV	PUSAULI-SAHUPURI	S/C	0	-207	0.0	-3.3	-3.3
11		SONE NAGAR-RIHAND	S/C	0	0	0.0	0.0	0.0
12	132 KV	GARWAH-RIHAND	S/C	49	0	0.9	0.0	0.9
13	132 KV	KARMANASA-SAHUPURI	S/C	0	-1	0.0	0.0	0.0
14	1	KARMANASA-CHANDAULI	S/C	0	0	0.0	0.0	0.0
	_				ER-NR	0.9	-44.8	-43.9
	Export of	ER (With WR)	D/C	7.	171	0.0	0.0	2.0
15 16	765 KV	JHARSUGUDA-DHARAMJAIGARH S/C NEW RANCHI-DHARAMJAIGARH	D/C S/C	-76 0	171 319	0.0	0.0	5.9
17		ROURKELA - RAIGARH (SEL LILO	S/C	0	0	2.2	0.0	2.2
18	+	BYPASS) JHARSUGUDA-RAIGARH	S/C	0	0	1.6	0.0	1.6
19	400 KV	IBEUL-RAIGARH	S/C	0	0	1.6	0.0	1.6
20		STERLITE-RAIGARH	D/C	0	0	1.2	-5.9	-5.9
21		RANCHI-SIPAT	D/C	1	0	0.0	-0.1	-0.1
22	220 KV	BUDHIPADAR-RAIGARH	S/C	415	0	6.7	0.0	6.7
23	220 KV	BUDHIPADAR-KORBA	D/C	0	-165	0.0	-0.3	-0.3
[mmout/]	Ermont of	ER (With SR)			ER-WR	13.3	-6.3	14.5
24	HVDC	JEYPORE-GAZUWAKA B/B	D/C	0	-739	0	-17.2	-17.2
25	LINK	TALCHER-KOLAR BIPOLE	D/C	0	-2166	0	-44.4	-44.4
26	400 KV	TALCHER-I/C		0	0	0	0	0
27	220 KV	BALIMELA-UPPER-SILERRU	S/C	0	0	0	0	0
					ER-SR	0.0	-61.6	-61.6
		ER (With NER)	1	1 220				
27	400 KV	BINAGURI-BONGAIGAON	Q/C D/C	328	-62	8	-2	-2
28	220 KV	BIRPARA-SALAKATI	D/C	U	-105 ER-NER	7.7	-2 -1.7	5.9
mport/l	Export of	WR (With NR)			ER TIER	7.7	-1.7	3.7
29	HVDC	V'CHAL B/B	D/C	150	-250	0.6	-3.1	-2.5
30		GWALIOR-AGRA	D/C	0	-2546	0.0	-52.9	-52.9
							10	-19
31	765 KV	PHAGI-GWALIOR	D/C	0	-950	0	-19	
32	400 KV	ZERDA-KANKROLI	S/C	164	-24	0.8	0.0	0.8
32 33	400 KV 400 KV	ZERDA-KANKROLI ZERDA -BHINMAL	S/C S/C	164 112	-24 -150	0.8 1.1	0.0	0.8 1.1
32 33 34	400 KV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND	S/C S/C S/C	164 112 0	-24 -150 -507	0.8 1.1 0.0	0.0 0.0 -12.0	0.8 1.1 -12.0
32 33 34 35	400 KV 400 KV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND BADOD-KOTA	S/C S/C S/C S/C	164 112 0 55	-24 -150 -507 -52	0.8 1.1 0.0 0.1	0.0 0.0 -12.0 -0.4	0.8 1.1 -12.0 -0.3
32 33 34 35 36	400 KV 400 KV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND BADOD-KOTA BADOD-MORAK	S/C S/C S/C S/C S/C	164 112 0 55 127	-24 -150 -507 -52 0	0.8 1.1 0.0 0.1 2.0	0.0 0.0 -12.0 -0.4 0.0	0.8 1.1 -12.0 -0.3 2.0
32 33 34 35	400 KV 400 KV 400 KV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA	S/C S/C S/C S/C	164 112 0 55	-24 -150 -507 -52	0.8 1.1 0.0 0.1	0.0 0.0 -12.0 -0.4	0.8 1.1 -12.0 -0.3
32 33 34 35 36 37	400 KV 400 KV 400 KV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND BADOD-KOTA BADOD-MORAK	S/C S/C S/C S/C S/C S/C S/C	164 112 0 55 127 51	-24 -150 -507 -52 0	0.8 1.1 0.0 0.1 2.0 0.8	0.0 0.0 -12.0 -0.4 0.0 0.0	0.8 1.1 -12.0 -0.3 2.0 0.8
32 33 34 35 36 37 38	400 KV 400 KV 400 KV - 220 KV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA	S/C S/C S/C S/C S/C S/C S/C S/C S/C	164 112 0 55 127 51 18	-24 -150 -507 -52 0 0	0.8 1.1 0.0 0.1 2.0 0.8 0.1	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0
32 33 34 35 36 37 38 39	400 KV 400 KV 400 KV - 220 KV 132KV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR APL -MHG	S/C S/C S/C S/C S/C S/C S/C S/C S/C	164 112 0 55 127 51 18	-24 -150 -507 -52 0 0 20	0.8 1.1 0.0 0.1 2.0 0.8 0.1	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0
32 33 34 35 36 37 38 39 40	400 KV 400 KV 400 KV - 220 KV 132KV HVDC Export of	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR APL -MHG WR (With SR)	S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6
32 33 34 35 36 37 38 39 40 mport/J	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR APL -MHG WR (With SR) BHADRAWATI B/B	S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6
32 33 34 35 36 37 38 39 40 (mport/) 41 42	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC LINK	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR APL -MHG WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6
32 33 34 35 36 37 38 39 40 Import/I 41 42 43	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR APL -MHG WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU SOLAPUR-RAICHUR	S/C S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519 -1000 0	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0 0.0 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6 -22.2 0.0 -7.2
32 33 34 35 36 37 38 39 40 (mport/) 41 42	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC LINK	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND BADOD-KOTA BADOD-MORAK MEHGAON-AURAIYA MALANPUR-AURAIYA GWALIOR-SAWAI MADHOPUR APL -MHG WR (With SR) BHADRAWATI B/B BARSUR-L.SILERU	S/C S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6
32 33 34 35 36 37 38 39 40 (Import/I 41 42 43 44	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC LINK 765 KV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND 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	S/C S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519 -1000 0 -182	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6 -22.2 0.0 -7.2 -3.7	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 -81.7 -57.6 -22.2 0.0 -7.2 -3.7
32 33 34 35 36 37 38 39 40 **mport/l 41 42 43 44 45	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC LINK 765 KV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND 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	S/C S/C	164 112 0 55 127 51 18 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519 -1000 0 -182 0	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6 -22.2 0.0 -7.2 -3.7 0.0	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6 -22.2 0.0 -7.2 -3.7 0.0
32 33 34 35 36 37 38 39 40 mport/l 41 42 43 44 45 46	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC LINK 765 KV	ZERDA-KANKROLI ZERDA -BHINMAL V'CHAL -RIHAND 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	S/C S/C	164 112 0 55 127 51 18 0 0 0 0 0 0 0 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519 -1000 0 -182 0 WR-SR	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0 0.0 0.0 0.0 0.0 1.8	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6 -22.2 0.0 -7.2 -3.7 0.0 0.0	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6 -22.2 0.0 -7.2 -3.7 0.0 1.8
32 33 34 35 36 37 38 39 40 mport/l 41 42 43 44 45	400 KV 400 KV 400 KV 220 KV 132KV HVDC Export of HVDC LINK 765 KV	ZERDA-KANKROLI ZERDA -BHINMAL VCHAL -RIHAND 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	S/C S/C	164 112 0 55 127 51 18 0 0 0 0 0 0 0 0	-24 -150 -507 -52 0 0 20 0 WR-NR -2519 -1000 0 -182 0 WR-SR	0.8 1.1 0.0 0.1 2.0 0.8 0.1 0.0 5.5 0.0 0.0 0.0 0.0 0.0 0.0 1.8	0.0 0.0 -12.0 -0.4 0.0 0.0 -0.1 0.0 -87.2 -57.6 -22.2 0.0 -7.2 -3.7 0.0 0.0	0.8 1.1 -12.0 -0.3 2.0 0.8 0.0 0.0 -81.7 -57.6 -22.2 0.0 -7.2 -3.7 0.0 1.8