



*whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding (manual) shall be carried out in the concerned State to curtail the over-drawal.”*

#### *6.4 Demarcation of responsibilities*

*7. Provided that the States, through their SLDCs, shall always endeavour to restrict their net drawal from the grid to within their respective drawal schedules, whenever the system frequency is below 49.5 Hz. When the frequency falls below 49.2 Hz, requisite load shedding shall be carried out in the concerned State(s) to curtail the over-drawal.”*

2. In keeping with the above noted provisions of the Grid Code, with effect from 1.4.2009, manual load shedding is to be carried out to curtail over-drawal when the grid frequency falls below 49.2 Hz.

3. Further clause (1) of regulation 7 of the Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009 (hereinafter “the UI charges regulations” ) prescribes the following limits on over-drawal volumes:

*(1) The over-drawal of electricity from the schedule by any beneficiary or a buyer during a time-block shall not exceed 12% of its scheduled drawal or 150 MW (whichever is lower) when frequency is below 49.5 Hz, and 3% on a daily aggregate basis.*

4. Clause (4) of regulation 7 of the UI charges regulations specifically provides as under:

*(4) Payment of Unscheduled Interchange Charges under regulation 5 and the Additional Unscheduled Interchange Charge under Regulation 7(3) above, shall be without prejudice to any action that may be considered appropriate under section 142 and section 149 of the Act for contravention of the over-drawal and under-generation limit specified in these regulations, for a time block when frequency is below 49.5 Hz.*

5. It has been reported by the Southern Regional Load Despatch Centre (SRLDC) that the respondent had, during the period from 10.4.2009 to 12.5.2009, over-drawn on several occasions from the grid, even when the frequency of the grid was below 49.2 Hz. As per the report, over-drawal by the respondent was more than 50 MW during 455 time-blocks during 10.4.2009 to 10.5.2009. Broadly the pattern of over-drawal has been as under:

S. No	Volume of over-drawal (MW)	Number of time- blocks
1	More than 50 MW and less than or equal to 100 MW	56
2	More than 100 MW and less than or equal to 200 MW	120
3	More than 200 MW and less than or equal to 500 MW	234
4	More than 500 MW and less than or equal to 1000 MW	45
	<b>Total</b>	<b>455</b>

6. The details of the above over-drawals are combined in Annexure I attached to this order.

7. With a view to curtailing over-drawal and ensuing grid security, SRLDC has, with the knowledge of the constituents of southern region, evolved a scheme of issuing different categories of messages to the over-drawing constituents to caution and restrain them from over-drawal. The following are the broad features of the scheme, namely –

- (a) Category 'A' message is an alert message under para 6.4.7 of the Grid Code, issued to an over-drawing constituent at the frequency below

49.2 Hz. where the volume of over-drawal exceeds 50 MW or 10% of the schedule, whichever is less.

(b) Category 'B' message is issued in pursuance of para 6.4.12 of the Grid Code under the following conditions, namely –

(i) Frequency is below 49.2 Hz. and volume of over-drawal is more than 50 MW and below 200 MW for more than 10 minutes. .

or

(ii) Frequency is below 49.2 Hz. and volume of over-drawal is 200 MW or more for more than 5 minutes.

(c) Category 'C' message implies that provisions of para 6.4.12 of the Grid Code have been violated despite issue of Category 'B' Message. The message is issued when, 15 minutes after the Category 'B' Message, frequency continues to be below 49.2 Hz. and volume of over-drawal is more than 50 MW or 10% of the schedule, whichever is less.

8. As per the report of SRLDC, 62 Category 'B' messages and 35 Category 'C' messages were issued to the respondent, the details of which are enclosed as Annexures II and III attached to this order, respectively.

9. On perusal of the details *prima facie*, we are of the opinion that the respondent is guilty of contravention of and non-compliance with the provisions of the Grid Code.

10. Accordingly, the respondent is hereby directed to show cause as to why it should not be held guilty of contravention of and non-compliance with the provisions of the Grid Code and penalty under Section 142 of the Act be not imposed on it for over-drawal of electricity for each occasion in contravention of the provisions of the Grid Code. The reply may be submitted latest by 30.6.2009.

11. The Member-Secretary SRPC and the General Manager, SRLDC or their representatives shall assist the Commission in the present proceedings.

12. List this petition for further directions on 16.7.2009.

<b>Sd/-</b> [V. S. VERMA] MEMBER	<b>Sd/-</b> [S. JAYARAMAN] MEMBER	<b>Sd/-</b> [R. KRISHNAMOORTHY] MEMBER	<b>Sd/-</b> [DR. PRAMOD DEO] CHAIRPERSON
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**New Delhi, dated 12<sup>th</sup> June, 2009**

## Annexure I

DATE	BLOCK NO.	Over Drawl (Avg. MW)
10.04.09	1	525
10.04.09	2	348
10.04.09	3	431
10.04.09	4	389
10.04.09	5	314
10.04.09	7	376
10.04.09	10	407
10.04.09	14	282
10.04.09	15	410
10.04.09	16	356
10.04.09	17	431
10.04.09	18	446
10.04.09	19	441
10.04.09	20	457
10.04.09	21	417
10.04.09	22	397
10.04.09	23	399
10.04.09	24	278
10.04.09	27	135
10.04.09	28	235
10.04.09	34	455
10.04.09	35	373
10.04.09	38	540
10.04.09	39	374
10.04.09	44	318
10.04.09	45	350
10.04.09	47	257
10.04.09	48	133
10.04.09	55	63
10.04.09	59	128
10.04.09	60	202
10.04.09	61	275
10.04.09	62	321
10.04.09	63	321
10.04.09	64	315
10.04.09	76	625
10.04.09	77	484
10.04.09	79	443
10.04.09	80	414
10.04.09	84	545
10.04.09	85	415
10.04.09	86	299
10.04.09	87	257
10.04.09	89	198
10.04.09	90	179
10.04.09	91	182

10.04.09	92	192
10.04.09	94	80
11.04.09	1	212
11.04.09	2	100
11.04.09	3	62
11.04.09	4	85
11.04.09	5	79
11.04.09	6	77
11.04.09	9	112
11.04.09	19	90
11.04.09	20	101
11.04.09	22	187
11.04.09	23	155
11.04.09	24	110
11.04.09	27	51
11.04.09	28	158
11.04.09	30	240
11.04.09	51	169
11.04.09	52	222
11.04.09	53	284
11.04.09	54	302
11.04.09	55	277
11.04.09	56	211
11.04.09	57	226
11.04.09	58	271
11.04.09	59	298
11.04.09	60	263
11.04.09	62	92
11.04.09	67	217
11.04.09	69	112
11.04.09	70	127
11.04.09	76	295
11.04.09	78	176
11.04.09	79	150
11.04.09	80	73
11.04.09	85	171
11.04.09	86	115
13.04.09	50	116
13.04.09	51	136
13.04.09	52	139
13.04.09	54	264
13.04.09	55	126
13.04.09	56	140
13.04.09	59	200
13.04.09	60	179
13.04.09	61	167
13.04.09	62	80

13.04.09	63	151
13.04.09	64	100
14.04.09	52	110
14.04.09	54	88
14.04.09	61	158
14.04.09	62	126
15.04.09	23	92
15.04.09	27	113
15.04.09	31	184
15.04.09	34	154
15.04.09	36	80
15.04.09	37	301
15.04.09	38	103
15.04.09	39	151
15.04.09	43	158
15.04.09	45	334
15.04.09	46	166
15.04.09	47	114
15.04.09	50	82
15.04.09	52	59
15.04.09	56	56
15.04.09	57	61
15.04.09	58	66
15.04.09	59	66
15.04.09	60	99
15.04.09	61	124
15.04.09	62	73
15.04.09	63	173
15.04.09	91	83
16.04.09	21	138
16.04.09	22	131
16.04.09	51	216
16.04.09	52	234
17.04.09	22	101
17.04.09	23	133
17.04.09	44	409
17.04.09	46	304
17.04.09	50	101
17.04.09	51	87
17.04.09	52	111
17.04.09	54	253
17.04.09	56	72
17.04.09	57	77
17.04.09	58	94
17.04.09	59	59
17.04.09	61	111
17.04.09	62	100
18.04.09	23	126



18.04.09	32	138
18.04.09	58	192
18.04.09	63	196
18.04.09	85	59
18.04.09	89	260
18.04.09	90	272
18.04.09	93	106
19.04.09	1	191
19.04.09	2	55
19.04.09	21	95
19.04.09	22	64
19.04.09	54	144
19.04.09	55	150
19.04.09	58	136
19.04.09	59	127
22.04.09	53	169
22.04.09	54	119
22.04.09	55	119
23.04.09	22	380
24.04.09	18	326
24.04.09	19	345
24.04.09	20	272
24.04.09	21	150
24.04.09	39	446
24.04.09	47	197
24.04.09	56	127
24.04.09	58	121
25.04.09	34	53
25.04.09	35	54
25.04.09	42	63
25.04.09	43	54
25.04.09	52	68
25.04.09	58	159
26.04.09	22	62
26.04.09	51	68
26.04.09	58	285
26.04.09	59	155
26.04.09	60	157
26.04.09	63	271
27.04.09	1	442
27.04.09	17	403
27.04.09	18	264
27.04.09	19	126
27.04.09	20	159
27.04.09	21	152
27.04.09	22	196
27.04.09	39	723
27.04.09	43	647

27.04.09	44	552
27.04.09	45	554
27.04.09	46	582
27.04.09	47	250
27.04.09	50	349
27.04.09	51	479
27.04.09	52	593
27.04.09	53	454
27.04.09	54	376
27.04.09	55	317
27.04.09	56	278
27.04.09	57	273
27.04.09	58	397
27.04.09	59	490
27.04.09	60	481
27.04.09	61	363
27.04.09	62	408
27.04.09	63	492
27.04.09	64	528
27.04.09	65	665
27.04.09	66	582
27.04.09	67	532
27.04.09	68	530
27.04.09	69	624
27.04.09	71	701
27.04.09	76	533
27.04.09	77	388
27.04.09	78	337
27.04.09	79	281
27.04.09	80	319
27.04.09	81	309
27.04.09	82	269
27.04.09	84	355
27.04.09	85	350
27.04.09	86	311
27.04.09	89	430
27.04.09	90	352
27.04.09	94	480
28.04.09	18	386
28.04.09	19	259
28.04.09	21	221
28.04.09	38	555
28.04.09	39	461
28.04.09	40	388
28.04.09	43	444
28.04.09	44	444
28.04.09	45	477
28.04.09	46	421

28.04.09	47	360
28.04.09	48	199
28.04.09	51	296
28.04.09	52	318
28.04.09	53	245
28.04.09	54	247
28.04.09	55	258
28.04.09	56	188
28.04.09	58	310
28.04.09	59	260
28.04.09	60	201
28.04.09	61	233
28.04.09	62	237
28.04.09	63	253
28.04.09	64	300
28.04.09	66	458
28.04.09	67	384
28.04.09	69	423
28.04.09	70	302
28.04.09	76	226
28.04.09	77	339
28.04.09	78	228
28.04.09	79	253
28.04.09	80	228
28.04.09	81	251
28.04.09	82	249
28.04.09	83	303
28.04.09	84	283
28.04.09	85	224
29.04.09	1	327
29.04.09	11	333
29.04.09	12	314
29.04.09	14	293
29.04.09	15	223
29.04.09	17	408
29.04.09	19	332
29.04.09	20	279
29.04.09	21	245
29.04.09	22	250
29.04.09	30	394
29.04.09	31	330
29.04.09	34	284
29.04.09	35	225
29.04.09	36	221
29.04.09	38	437
29.04.09	39	377
29.04.09	40	348
29.04.09	42	365

29.04.09	43	349
29.04.09	44	280
29.04.09	45	345
29.04.09	46	282
29.04.09	47	215
29.04.09	48	200
29.04.09	51	281
29.04.09	52	232
29.04.09	53	310
29.04.09	54	208
29.04.09	55	174
29.04.09	56	173
29.04.09	58	168
29.04.09	59	216
29.04.09	60	224
29.04.09	61	353
29.04.09	62	318
29.04.09	63	268
29.04.09	64	107
29.04.09	65	143
29.04.09	66	272
29.04.09	69	399
29.04.09	70	363
30.04.09	22	84
30.04.09	42	60
30.04.09	43	155
30.04.09	51	107
30.04.09	53	245
30.04.09	55	162
30.04.09	58	200
30.04.09	59	143
30.04.09	62	126
02.05.09	22	102
02.05.09	42	124
02.05.09	44	137
02.05.09	47	135
02.05.09	52	229
02.05.09	54	134
02.05.09	55	95
02.05.09	56	106
02.05.09	58	195
02.05.09	59	183
02.05.09	60	124
03.05.09	20	76
03.05.09	22	220
03.05.09	23	111
03.05.09	44	458
03.05.09	46	372

03.05.09	47	244
03.05.09	50	60
03.05.09	51	184
03.05.09	52	154
03.05.09	54	87
03.05.09	55	99
03.05.09	56	146
03.05.09	57	171
03.05.09	58	212
03.05.09	59	300
03.05.09	60	302
03.05.09	61	302
03.05.09	63	314
04.05.09	50	138
04.05.09	51	246
04.05.09	52	245
04.05.09	53	209
04.05.09	54	186
04.05.09	55	145
04.05.09	56	156
04.05.09	58	184
04.05.09	60	144
05.05.09	58	73
05.05.09	59	73
05.05.09	62	67
06.05.09	47	353
06.05.09	50	211
06.05.09	51	249
06.05.09	52	302
06.05.09	53	262
06.05.09	54	249
06.05.09	55	247
06.05.09	56	216
06.05.09	57	246
06.05.09	58	234
06.05.09	59	189
06.05.09	60	242
06.05.09	61	161
06.05.09	64	70
06.05.09	81	240
06.05.09	82	240
06.05.09	83	248
06.05.09	84	262
06.05.09	85	147
07.05.09	22	172

07.05.09	23	183
07.05.09	27	252
07.05.09	38	607
07.05.09	39	681
07.05.09	40	651
07.05.09	43	413
07.05.09	44	424
07.05.09	46	464
07.05.09	47	302
07.05.09	48	126
07.05.09	50	125
07.05.09	51	192
07.05.09	52	162
07.05.09	53	598
07.05.09	54	504
07.05.09	55	317
07.05.09	58	493
07.05.09	59	499
07.05.09	60	501
07.05.09	61	474
07.05.09	62	430
07.05.09	63	369
07.05.09	65	389
07.05.09	66	282
08.05.09	27	330
08.05.09	28	272
08.05.09	29	384
08.05.09	30	346
08.05.09	31	319
08.05.09	33	94
08.05.09	34	148
08.05.09	35	255
08.05.09	36	227
08.05.09	38	660
08.05.09	39	557
08.05.09	40	548
08.05.09	41	928
08.05.09	42	712
08.05.09	43	572
08.05.09	44	592
08.05.09	45	661
08.05.09	46	585
08.05.09	47	432
08.05.09	50	448

08.05.09	51	552
08.05.09	52	566
08.05.09	53	614
08.05.09	54	584
08.05.09	55	550
08.05.09	56	570
08.05.09	57	594
08.05.09	58	618
08.05.09	59	597
08.05.09	60	538
08.05.09	61	511
08.05.09	62	470
08.05.09	63	475
08.05.09	64	460
08.05.09	65	388
08.05.09	66	303
08.05.09	67	237
08.05.09	70	364
08.05.09	71	347
09.05.09	28	106
09.05.09	51	134
09.05.09	52	255
09.05.09	54	212
09.05.09	55	171
09.05.09	56	149
09.05.09	57	373
09.05.09	58	402
09.05.09	59	383
09.05.09	60	288
09.05.09	61	359
09.05.09	62	345
09.05.09	63	366
09.05.09	64	283
Total No. of Blocks		455

## Annexure II

S.No	DATE	TIME	MESSAGE NUMBER	OVER-DRAWAL	FREQUENCY
1	10.Apr.2009	12:11:00 AM	2042	391	48.74
2	10.Apr.2009	3:38:00 AM	2043	422	48.92
3	10.Apr.2009	4:27:00 AM	2044	461	48.80
4	10.Apr.2009	6:50:00 PM	2046	659	48.76
5	10.Apr.2009	7:34:00 PM	2047	434	49.07
6	10.Apr.2009	9:04:00 PM	2048	477	48.98
7	10.Apr.2009	10:12:00 PM	2049	160	49.12
8	11.Apr.2009	1:15:00 AM	2052	62	49.07
9	11.Apr.2009	4:43:00 AM	2056	100	49.04
10	11.Apr.2009	5:48:00 AM	2058	107	49.09
11	11.Apr.2009	6:51:00 AM	2059	148	49.10
12	11.Apr.2009	1:34:00 PM	2060	278	48.96
13	11.Apr.2009	2:15:00 PM	2061	238	48.99
14	16.Apr.2009	12:41:00 PM	2071	311	49.09
15	17.Apr.2009	11:09:00 AM	2072	376	49.18
16	17.Apr.2009	12:15:00 PM	2073	93	49.10
17	18.Apr.2009	10:16:00 PM	2074	253	48.97
18	24.Apr.2009	4:58:00 AM	2076	188	49.10
19	27.Apr.2009	10:43:00 AM	2078	570	49.09
20	27.Apr.2009	12:39:00 PM	2079	369	48.76
21	27.Apr.2009	2:22:00 PM	2080	302	48.71
22	27.Apr.2009	4:18:00 PM	2081	587	48.75
23	27.Apr.2009	6:53:00 PM	2082	375	48.64
24	27.Apr.2009	10:12:00 PM	2083	350	49.09
25	27.Apr.2009	11:21:00 PM	2084	446	49.13
26	28.Apr.2009	4:23:00 AM	2085	385	49.16
27	28.Apr.2009	9:47:00 AM	2086	369	49.08
28	28.Apr.2009	10:45:00 AM	2087	366	49.16
29	28.Apr.2009	11:23:00 AM	2088	412	48.76
30	28.Apr.2009	12:35:00 PM	2089	291	49.15
31	28.Apr.2009	1:17:00 PM	2090	192	49.02
32	28.Apr.2009	2:33:00 PM	2091	244	48.57
33	28.Apr.2009	8:45:00 PM	2092	217	48.98
34	29.Apr.2009	9:48:00 AM	2093	326	49.13
35	29.Apr.2009	10:43:00 AM	2094	323	48.99
36	29.Apr.2009	12:42:00 PM	2095	236	49.09
37	29.Apr.2009	1:21:00 PM	2096	172	49.09



38	29.Apr.2009	2:46:00 PM	2097	193	48.69
39	03.May.2009	11:24:00 AM	2098	251	49.15
40	03.May.2009	11:41:00 AM	2099	121	49.04
41	04.May.2009	10:15:00 AM	2100	308	49.04
42	04.May.2009	12:55:00 PM	2101	188	48.75
43	06.May.2009	11:35:00 AM	2103	312	48.96
44	06.May.2009	12:39:00 PM	2104	235	48.88
45	06.May.2009	1:18:00 PM	2105	256	48.82
46	07.May.2009	9:29:00 AM	2106	585	49.02
47	07.May.2009	10:31:00 AM	2107	361	49.04
48	07.May.2009	11:25:00 AM	2108	470	48.97
49	07.May.2009	12:57:00 PM	2109	251	48.70
50	07.May.2009	2:43:00 PM	2110	454	48.98
51	08.May.2009	8:52:00 AM	2111	203	49.03
52	08.May.2009	9:33:00 AM	2112	508	48.91
53	08.May.2009	12:22:00 PM	2113	426	48.99
54	08.May.2009	4:23:00 PM	2114	255	49.08
55	09.May.2009	2:14:00 PM	2115	368	49.02
56	09.May.2009	3:50:00 PM	2116	281	49.15
57	11.May.2009	11:44:00 AM	2117	159	49.10
58	11.May.2009	12:59:00 PM	2118	190	49.12
59	11.May.2009	2:33:00 PM	2119	120	49.10
60	11.May.2009	3:12:00 PM	2120	371	49.12
61	12.May.2009	2:31:00 PM	2121	215	49.03
62	12.May.2009	3:20:00 PM	2122	100	48.88

## Annexure III

S.No	DATE	TIME	MESSAGE NUMBER	OVER-DRAWAL	FREQUENCY
1	10.Apr.2009	12:26:00 AM	513	365	48.98
2	10.Apr.2009	4:43:00 AM	514	455	48.82
3	10.Apr.2009	7:05:00 PM	516	514	49.12
4	10.Apr.2009	9:18:00 PM	517	292	48.96
5	11.Apr.2009	1:49:00 PM	520	245	48.84
6	11.Apr.2009	2:30:00 PM	521	298	48.99
7	27.Apr.2009	10:59:00 AM	524	369	48.76
8	27.Apr.2009	12:54:00 PM	525	548	48.88
9	27.Apr.2009	2:37:00 PM	526	375	48.65
10	27.Apr.2009	4:36:00 PM	527	494	48.79
11	27.Apr.2009	7:08:00 PM	528	297	48.60
12	27.Apr.2009	8:10:00 PM	529	268	48.98
13	27.Apr.2009	10:27:00 PM	530	305	49.15
14	28.Apr.2009	11:38:00 AM	531	293	48.62
15	28.Apr.2009	12:51:00 PM	532	311	48.91
16	28.Apr.2009	1:34:00 PM	533	262	48.86
17	28.Apr.2009	2:50:00 PM	534	177	48.67
18	29.Apr.2009	10:58:00 AM	535	259	49.05
19	29.Apr.2009	12:57:00 PM	536	196	49.15
20	29.Apr.2009	2:59:00 PM	537	252	48.74
21	06.May.2009	12:54:00 PM	538	327	48.97
22	06.May.2009	1:33:00 PM	539	207	49.01
23	07.May.2009	9:44:00 AM	540	671	48.87
24	07.May.2009	10:46:00 AM	541	402	48.90
25	07.May.2009	11:40:00 AM	542	190	48.58
26	07.May.2009	1:12:00 PM	543	583	48.67
27	07.May.2009	3:06:00 PM	544	439	48.84
28	08.May.2009	9:50:00 AM	545	517	48.57
29	08.May.2009	12:39:00 PM	546	566	48.84
30	08.May.2009	4:38:00 PM	547	206	48.99
31	09.May.2009	2:28:00 PM	548	419	48.92
32	11.May.2009	1:14:00 PM	549	210	49.12
33	11.May.2009	2:49:00 PM	550	120	49.10
34	11.May.2009	3:27:00 PM	551	278	48.90
35	12.May.2009	2:41:00 PM	552	280	49.05