

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri R.Krishnamoorthy, Member**
- 3. Shri S.Jayaraman, Member**
- 4. Shri V. S. Verma, Member**

**Petition No 130/2009
(Suo-motu)**

In the matter of

Maintenance of Grid Discipline – Non -compliance of provisions of the Indian Electricity Grid Code by Tamil Nadu Electricity Board during May 2009

And in the matter of

Tamil Nadu Electricity Board, Chennai ... **Respondent**

ORDER

In exercise of powers conferred under Section 178 of the Electricity Act, 2003 (the Act), the Central Electricity Regulatory Commission (the Commission) has specified the Indian Electricity Grid Code (the Grid Code). Paras 5.4.2(a) and 6.4.7 of the Grid Code, as amended by the Indian Electricity Grid Code (Amendment) Regulations, 2009, applicable from 1.4.2009, enjoin upon the State utilities to endeavor to restrict their net drawal from the grid to their respective drawal schedule whenever the system frequency is below 49.5 Hz. It has been further provided that the requisite load-shedding shall be carried out manually

when frequency falls below 49.2 Hz, to curtail over-drawal. Extracts of relevant paras of the Grid Code are reproduced below:

“5.4.2 Manual Demand Disconnection (a) As mentioned elsewhere, the constituents shall endeavour to restrict their net drawal from the grid to within their respective drawl schedules 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) under its letter No. SRLDC/OS/OD-DATA/CERC/25052009-31052009/3190 dated 11.6.2009 that the respondent had, during the period from 25.5.2009 to 31.5.2009, over-drawn on several occasions from the grid, in violation of the above mentioned regulatory provisions. It is seen from the data submitted by SRLDC that on all the days during the above period, the respondent had overdrawn in excess of 3% of the schedule on aggregate basis. Average MW value of all the time-blocks during which the respondent was over-drawing at frequency 49.5 Hz during the above period is as under:

S.No	Date	Over-drawal (MW)
(a)	25.05.09	604
(b)	26.05.09	791
(c)	27.05.09	422
(d)	28.05.09	76
(e)	29.05.09	169
(f)	30.05.09	369
(g)	31.05.09	662
	Total for seven days	3093
	Total MWH	20664

6. It is also seen that during 102 time-blocks during the above period, the respondent had over-drawn from the grid in excess of 12% of the schedule when the frequency was below 49.5 Hz. Similarly, there were 44 time-blocks during the above period when the respondent had over-drawn from the grid at frequency below 49.2 Hz. The details of the time blocks during which the respondent was over-drawing from the grid in excess of 12% of the schedule at frequency below 49.5 Hz. during the above period are given in Annexure I attached to this order and the details of over-drawal by the respondent at frequency below 49.2 Hz. during the above period are given in Annexure II to this order.

7. The above acts of the respondent as such are in violation of the provisions of the Grid Code as well as the UI charges regulations and call for appropriate proceedings against the respondent. *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.

8. 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 and the UI charges regulations *ibid*. The reply may be submitted latest by 20.7.2009.

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

10. List this petition for further directions on 27.7.2009.

Sd/-
[V. S. VERMA]
MEMBER

Sd/-
[S. JAYARAMAN]
MEMBER

Sd/-
[R. KRISHNAMOORTHY]
MEMBER

Sd/-
[DR. PRAMOD DEO]
CHAIRPERSON

New Delhi, dated 2nd July 2009

Annexure I

Details of the time blocks when the respondent was overdrawing by more than 12% in excess of schedule when the frequency was below 49.5.Hz.

S.No	Date	Block	Volume (MW)
1.	25.05.09	61	481
2.	25.05.09	64	400
3.	25.05.09	76	649
4.	25.05.09	77	759
5.	25.05.09	78	766
6.	25.05.09	79	855
7.	25.05.09	80	873
8.	25.05.09	81	797
9.	25.05.09	89	568
10.	25.05.09	90	764
11.	26.05.09	19	972
12.	26.05.09	20	1077
13.	26.05.09	21	1079
14.	26.05.09	22	977
15.	26.05.09	23	797
16.	26.05.09	27	990
17.	26.05.09	28	900
18.	26.05.09	29	862
19.	26.05.09	30	810
20.	26.05.09	31	925
21.	26.05.09	32	1028
22.	26.05.09	33	1107
23.	26.05.09	34	1130
24.	26.05.09	35	1133
25.	26.05.09	36	1154
26.	26.05.09	38	1102
27.	26.05.09	39	1121
28.	26.05.09	40	1194
29.	26.05.09	41	1328
30.	26.05.09	42	1291
31.	26.05.09	43	1282
32.	26.05.09	44	1307
33.	26.05.09	45	1373
34.	26.05.09	47	1082
35.	26.05.09	48	911

36.	26.05.09	50	610
37.	26.05.09	51	680
38.	26.05.09	52	739
39.	26.05.09	54	633
40.	26.05.09	55	603
41.	26.05.09	56	631
42.	26.05.09	58	717
43.	26.05.09	59	674
44.	26.05.09	60	651
45.	26.05.09	61	681
46.	26.05.09	62	727
47.	26.05.09	63	746
48.	26.05.09	64	746
49.	26.05.09	65	748
50.	26.05.09	66	814
51.	26.05.09	67	927
52.	26.05.09	68	839
53.	26.05.09	76	354
54.	26.05.09	77	460
55.	26.05.09	78	448
56.	26.05.09	79	396
57.	26.05.09	80	326
58.	26.05.09	81	319
59.	26.05.09	84	275
60.	27.05.09	21	275
61.	27.05.09	23	284
62.	27.05.09	24	342
63.	27.05.09	26	672
64.	27.05.09	27	641
65.	27.05.09	28	642
66.	27.05.09	29	706
67.	27.05.09	30	772
68.	27.05.09	31	808
69.	27.05.09	32	843
70.	27.05.09	33	883
71.	27.05.09	34	874
72.	27.05.09	35	802
73.	27.05.09	36	803
74.	27.05.09	37	850
75.	27.05.09	38	761
76.	27.05.09	39	745
77.	27.05.09	40	737
78.	27.05.09	41	578
79.	27.05.09	42	572
80.	27.05.09	43	504

81.	27.05.09	44	442
82.	27.05.09	45	707
83.	27.05.09	46	433
84.	27.05.09	83	381
85.	27.05.09	84	426
86.	27.05.09	85	401
87.	27.05.09	89	301
88.	27.05.09	90	387
89.	27.05.09	91	362
90.	27.05.09	92	338
91.	29.05.09	30	381
92.	29.05.09	31	335
93.	29.05.09	90	425
94.	30.05.09	34	938
95.	30.05.09	72	529
96.	31.05.09	2	890
97.	31.05.09	19	852
98.	31.05.09	20	794
99.	31.05.09	21	669
100.	31.05.09	22	591
101.	31.05.09	23	486
102.	31.05.09	40	353

Details of the time blocks during which the respondent was overdrawing when the frequency was below 49.2 Hz.

S.No	Date	Block	Volume (MW)
1.	25.05.09	78	766
2.	25.05.09	79	855
3.	25.05.09	80	873
4.	26.05.09	30	810
5.	26.05.09	33	1107
6.	26.05.09	39	1121
7.	26.05.09	61	681
8.	26.05.09	62	727
9.	26.05.09	63	746
10.	26.05.09	76	354
11.	26.05.09	77	460
12.	26.05.09	78	448
13.	26.05.09	79	396
14.	26.05.09	80	326
15.	27.05.09	27	641
16.	27.05.09	28	642
17.	27.05.09	29	706
18.	27.05.09	30	772
19.	27.05.09	31	808
20.	27.05.09	32	843
21.	27.05.09	33	883
22.	27.05.09	34	874
23.	27.05.09	35	802
24.	27.05.09	36	803
25.	27.05.09	37	850
26.	27.05.09	38	761
27.	27.05.09	39	745
28.	27.05.09	40	737
29.	27.05.09	41	578
30.	27.05.09	42	572
31.	27.05.09	43	504
32.	27.05.09	44	442
33.	27.05.09	45	707
34.	27.05.09	46	433
35.	27.05.09	47	188
36.	27.05.09	51	103
37.	27.05.09	52	91

38.	27.05.09	57	42
39.	27.05.09	61	190
40.	27.05.09	62	209
41.	27.05.09	90	387
42.	28.05.09	22	172
43.	28.05.09	23	136
44.	28.05.09	56	62