

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. Dr. Pramod Deo, Chairperson
2. Shri Bhanu Bhushan, Member
3. Shri R.Krishnamoorthy, Member
4. Shri S.Jayaraman, Member

**Petition No137/2008  
(Suo-motu)**

**In the matter of**

Maintenance of Grid Discipline – Compliance of provisions of the Indian Electricity Grid Code.

**And in the matter of**

1. Tamil Nadu Electricity Board, Chennai
2. Shri S. Machendranathan, Chairman, (Formerly)  
Tamil Nadu Electricity Board, Chennai .....

**Respondents**

**The following were present**

1. Shri R. Murugan, TNEB
2. Shri V. Chandran, TNEB
3. Shri Abraham Varghese, SRLDC
4. Shri Shailendra Verma, SRLDC

**ORDER  
(Date of Hearing: 11.12.2008)**

The Commission has, in exercise of its powers under clause (h) of sub-section (1) of Section 79 read with Section 178 of the Electricity Act, 2003 (the Act), specified the Indian Electricity Grid Code (the Grid Code). Paras 5.4.2 (a) and 6.4.4 of the Grid Code ordain the regional constituents (the State utilities) to endeavour to restrict their net drawals from the grid to their respective drawal schedules, when the system frequency falls below 49.5 Hz. These provisions further provide that the concerned State utilities shall carry out manual load-shedding to curtail over-drawal when the system frequency falls below 49.0 Hz.

2. It was reported by Southern Regional Load Despatch Centre that the first respondent, during a number of time-blocks of the day on 10.10.2008 had over-drawn electricity at system frequency below 49.5 Hz. In particular, it was noted that over-drawals by the first respondent continued during certain time-blocks, as per details given hereunder, when the frequency was even below 49.0 Hz:

Time Block	System Frequency (Hz.)	TNEB		
		Schedule (MW)	Drawal (Avg. MW)	Over-drawal (MW)
23	49	1643	2712	1069
38	49	1738	2004	266
39	49	1738	1847	109
42	49	1683	1875	192
43	49	1692	1813	121
44	49	1692	1928	236
45	49	1692	1987	295
46	49	1692	1914	222
47	49	1692	1928	236
48	49	1692	1900	208
49	49	1683	1861	178
50	49	1683	1863	180
51	49	1683	1769	86
52	49	1683	1802	119
55	49	1681	1831	150
71	49	1727	1947	220
75	49	2229	2403	174
89	49	2121	2387	266
90	49	2105	2434	329
91	49	2091	2398	307
92	49	2091	2439	348
93	49	1795	2354	559
94	49	1825	2116	291
95	49	1833	2077	244
96	49	1833	2151	318

3. In view of the non-compliance of the above-referred provisions of the Grid Code, a show cause notice dated 18.11.2008 was issued to the first respondent, under Section 142 of the Act. Subsequently, by order dated 24.11.2008, show cause notice under Section 149

of the Act was also issued to the second respondent. In both the cases, replies were to be filed by 30.11.2008.

4. For the purpose of this order, both the show cause notices (dated 18.11.2008 and 24.11.2008) have been combined.

5. The first respondent by its letter dated 29.11.2008 requested for extension of time by two weeks for filing of its reply. However, a reply was filed on 4.12.2008.

6. The reply discloses that the second respondent had been transferred in the meantime and as such reply to the show cause notice has been filed by his successor. The affidavit accompanying the reply has been sworn by Shri R. Murugan, Chief Engineer (Operation) with the first respondent. We have, however, taken the reply on record as substantive reply by the first respondent

7. In the reply, it has been stated that on the fateful day, availability of electricity did not match with the restricted peak demand of 8298 MW because of forced outages at certain units of the generating stations supplying power to the State of Tamil Nadu, and that there was a sudden withdrawal of assistance to the extent of 950 MW to 1600 MW available from Eastern and Western Regions. It is further explained that the State has witnessed fall in hydel generation because of lower storage and inflows of water compared to the previous year and also drop in wind generation. The first respondent is stated to have since augmented power availability by procuring power from outside the State of Tamil Nadu as well as IPPs operating within the State, overlooking cost of supply. In addition, some other steps are also stated to have been taken on 10.10.2008, which, as stated by the first respondent, include switching off of feeders. The first respondent has explained that it took

steps to maintain the frequency within the operating band of 49.0 Hz to 50.5 Hz on 10.10.2008. However, over-drawals have been attributed, as already noted, to stoppage of external assistance, forced outages of State-owned units and ineffective implementation of revised load-shedding schedule introduced on the particular day itself. The first respondent has sought to reassure the Commission that it will mobilize additional resources of power supply to meet the shortfall and has accordingly prayed to the Commission not to take any action under Section 149 of the Act.

8. We have considered the matter very carefully. There is no denial of the charge contained in the order dated 18.11.2008 that the first respondent had over-drawn from the regional grid when frequency was below 49.0 Hz. The reasons for over-drawal explained by the first respondent are stereo-types of similar replies filed before the Commission in certain previous proceedings. In the earlier proceedings in Petition No. 89/2008 (Southern Regional Load Despatch Centre Vs. Transmission Corporation of Andhra Pradesh and others) involving an exactly identical issue of over-drawal, the first respondent made similar submissions as noted in para 8 of the Commission's order dated 22.9.2008, extracted below:

“8. Respondent No 3 has stated that the State has changed the entire load shedding pattern to get effective load relief. The respondent has given certain details of load-shedding said to have been resorted to it during the period. Further, it is stated that naphtha based generation is also being pursued. According to this respondent, reduction of generation at the Atomic Power Station and the generating stations owned by Neyveli Lignite Corporation is another contributory factor leading to over-drawl.”

9. Even if it is accepted that the first respondent took some steps to contain over-drawal, these steps are not considered to be adequate as the system frequency continued to hover below 49.0 Hz during a number of time-blocks (42 to 51 time-blocks at one stretch and 89 to 96 time-blocks at another). Over-drawals during the time-blocks 89 to 96 need a special mention. During 89<sup>th</sup> time-block, over-drawal was

to the extent of 266 MW which increased to 329 MW in the next time-block, to 307 MW in 91<sup>st</sup> time-block, to 348 MW during 92<sup>nd</sup> time-block, and to 559 MW during 93<sup>rd</sup> time-block. Further, from the data on record, it cannot be said that over-drawal was to meet to peak demand, as over-drawal were resorted to after 10:30 PM (time-blocks 89 to 96). On consideration of these facts, we are of the opinion that the justification given by the first respondent in support of reckless over-drawal at frequency below 49.0 Hz is of no avail to it. We, therefore, hold the first respondent guilty of violation of paras 5.4.2(a) and 6.4.4 of the Grid Code.

10. Earlier, by order dated 22.9.2008 in Petition No. 89/2008, the first respondent (the third respondent in those proceedings) was found guilty for over-drawal during July 2008 and punished. This has, however, not deterred the first respondent from indulging in indisciplined activities in relation to grid maintenance, as its conduct has not changed as may be seen from the data extracted above. This is another reason for not showing any leniency to the first respondent. In the present proceedings, collectively for all violations noticed above, we impose penalty of Rs. one lakh on the first respondent, to be deposited in the Commission's office latest by 20.1.2009.

11. Next we consider the matter in relation to the second respondent who was issued notice under Section 149 of the Act. Sub-section (1) of Section 149 provides that in case of an offence by a company, every person who at the time of commission of offence was in charge of and was responsible to the company for the conduct of its business, as well as the company, are deemed to be guilty of having committed the

offence and is liable to be proceeded against the punished accordingly. Proviso to sub-section (1) carves out an exception to the effect that the person concerned shall not be liable to any punishment if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of the offence. We have already held the first respondent of guilty of offence of non-compliance of the provisions of the directions of the Commission contained in the Grid Code. Therefore, by fiction of law and the deeming provisions of Section 149 (1) of the Act, the second respondent who was in-charge of and was responsible for the conduct of business of the first respondent on 10.10.2008, at the time of commission of offence by the latter, may also be guilty of non-compliance of the relevant provisions of the Grid Code. However, there is no formal reply from the second respondent on record. We consider it appropriate to issue a fresh notice to the second respondent to show cause, latest by 20.1.2009, as to why he should not be held guilty and penalty under Section 149 of the Act be not imposed on him. He should be present before the Commission at the next date of hearing. The second respondent shall be served through the present Chairman of the first respondent.

12. List this petition for further directions on 22.1.2009.

Sd/-  
[S. JAYARAMAN]  
MEMBER

Sd/-  
[R. KRISHNAMOORTHY]  
MEMBER

Sd/-  
[BHANU BHUSHAN]  
MEMBER

Sd/-  
[DR. PRAMOD DEO]  
CHAIRPERSON

New Delhi, dated 31<sup>st</sup> December 2008