

**CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**Petition No. 263/MP/2012**

Subject: Maintaining and ensuring Integrated, secured grid operation in Southern Region in terms of regulation 5.2 of the CERC Indian Electricity Grid Code Regulations 2010 and compliance of regulation 5.2 (n) and 5.4.2 (e) of the IEGC by providing adequate load relief through AUFR and df/dt schemes during contingencies.

Date of hearing: 14.2.2013

Coram: Dr. Pramod Deo, Chairperson  
Shri S. Jayaraman, Member  
Shri M. Deena Dayalan, Member

Petitioner: Southern Regional Load Despatch Centre

Respondents: Transmission Corporation of Andhra Pradesh Ltd. & Ors.

Parties Present: Shri V. Suresh, SRLDC  
Shri Meka Ramakrishnan, RPC  
Shri Satbir Singh, RPC  
Smt. Jyoti Prasad, POSOCO  
Smt. Swapna Seshadri, Advocate for SLDC, Karnataka  
Shri S. Valla Vinayagam, Advocate for TANTRANSCO

**Record of Proceedings**

The representative of SRLDC submitted that AUFR and df/dt relays in Southern Region are generally healthy and are in operative condition and the settings are as per the scheme specified by SRPC. Some of the defaults observed during protection audit were attended to by the constituents and while few are being complied. The loads available for relief in the identified feeders are far below the value declared by the constituents. He also submitted that providing inadequate load for relief lesser than the plan specified by SRPC amounts to violation of Regulation 9 of CEA (Grid Standard) Regulations, 2010 and Regulation 5.2 (n) of CERC (IEGC) Regulations. 2010 (Grid Code)

2. The representative of SRLDC further submitted that as the performance of AUFR and df/dt was much below the desired level, SRLDC started to monitor the feeder wise

load available for relief from September 2012 and it was observed that only 30% - 50% load is available for relief in the identified feeders. The matter was reported to SRPC every 10 days and was also taken-up in all the OCC, TCC and SRPC meetings. The SR constituents themselves confirmed that the load available for relief is only about 30% - 50% and attributed the situation to load shedding effected in the identified feeders. Even in the Spl.TCC meeting held on 11<sup>th</sup> & 12<sup>th</sup> February 2013, the SR constituents mentioned that the overlapping of loads among the four groups is inevitable. This amounts to violation of Regulation 5.4.2 (e) of the Grid Code.

3. The representative of SRLDC further submitted that the SR grid is already being operated with other difficulties like inadequate RGMO, sudden changeover of loads, over loading of lines, etc. In such a situation non-availability of adequate loads for AUFR & df/dt protection scheme poses severe threat to Grid Security.

4. The learned counsel for TANTRANSCO submitted that the defence mechanism is in place and they are in healthy working condition. The main problem is that there is shortage of power. Feeders have been identified and the load on these feeders is less because of shortage of power. Recently a meeting was held with PGCIL who have agreed to put more relays. He submitted that the SR grid is well protected with SPS and islanding schemes and the present level of load relief through AUFR and df/dt can take care of the security of SR grid. It was clarified that the different protection schemes are meant for different type of contingencies and the same is well demarcated in the Grid Code.

5. The learned counsel for KPTCL submitted that KPTCL has complied with the regulations and the directions issued by SRLDC. The representative of SRLDC clarified that the required load relief is not forthcoming and Karnataka SLDC need to identify the Urban Feeders for Stage III.

6. The representative of the RPC submitted that the shortage of relief is discussed in the OCC & PCC meetings. In the last PCC meeting the States have submitted that it is difficult to manage without overlap. However, the States have agreed to provide for proper relief and APTRANSCO has agreed to do it within a month. The Commission observed that a timeline should be fixed to overcome the shortage of relief.

7. In response to Commission's query, as regards the possible solution to the problem, the representative of SRLDC made the following suggestions:-

- a. The constituents should review and estimate the actual load in the feeders and consider minimum / average load in the feeder for computation instead of all time maximum values of the feeder.
- b. The constituents should identify additional feeders and include in the AUFR and df/dt scheme.
- c. In addition to the present connected feeders, urban feeders and other feeders where loads are available consistently have to be included for the Stage – III setting.

8. The representative of SRLDC requested the Commission to issue directions to all SR constituents to strictly comply with the provisions of IEGC 5.2 (n) and 5.4.2 (e) in Grid Code to ensure secure grid operations. He also submitted that the SR constituents should include feeders, which are not included at present, under UPPS.

9. The Commission directed that the issue shall be discussed at the RPC level meeting to decode the quantum of load which shall be increased to give desired result in a time bound manner. The Commission also directed the SRLDC to submit a quarterly report regarding progress of increase in quantum of relief.

10. On the request of learned counsels for TANTRANSCO and KPTCL, the Commission directed SRLDC to provide a copy of the rejoinders to TANRANSCO and KPTCL.

11. The Commission directed to list the matter on 9.4.2013.

By order of the Commission

Sd/-  
T. Rout  
Joint Chief (Law)