

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram**

1. **Shri Ashok Basu, Chairman**
2. **Shri D.P. Sinha, Member**
3. **Shri G.S. Rajamani, Member**
4. **Shri K.N.Sinha, Member**

**Petition No.79/2002**

**In the matter of**

Maintaining the Regional Grid Frequency at 49.00 HZ and above and compliance of direction of Regional Load Despatch Centre

**And in the matter of**

Southern Regional Load Despatch Centre

.....Petitioner

Vs

1. Andhra Pradesh Transmission Corporation Ltd., Hyderabad
  2. Karnataka Power Transmission Corporation Ltd., Bangalore
  3. Kerala State Electricity Board, Trivandrum
  4. Tamil Nadu State Electricity Board, Chennai
  5. Southern Regional Electricity Board, Bangalore
- ...Respondents

The following were present :

1. Shri S. Sivan, Member Secretary, SREB
2. Shri K. Srinivasa Rao, S.E, SREB
3. Shri M. Sivathanu Pillai, CE (SO), KSEB
4. Shri B. Ravindran, OSD, KSEB
5. Shri S.K. Sooni, AGM, SRLDC
6. Shri V. Mittal, AGM(SO), PGCIL
7. Shri U.K. Verma, CM, SRLDC
8. Shri Sunil Agrawal, CM(SO), PGCIL
9. Shri A.K. Sinha, MANAGER (SO), PGCIL

**ORDER**  
**(DATE OF HEARING : 18.6.2002)**

Through this petition, the petitioner, Southern Regional Load Despatch Centre seeks directions to the respondents to restrict drawal of power from the regional grid within the drawal schedule and resort to load shedding, if required, to maintain the grid frequency at 49.0 Hz and above as stipulated in IEGC and the directions issued by the Commission. A further direction has been sought to the respondents to comply with the instructions issued by the petitioner in its capacity as an apex body for integrated operation of the power system in the region.

2. The notice for hearing was issued. In response to the notice, the representatives of Kerala State Electricity Board (respondent No.3), Southern Regional Electricity Board (respondent No.5), in addition to the representative of the petitioner were present. None was present on behalf of the other respondents.

3. We have heard the representative of the petitioner in support of the petition. He has brought to our notice a number of instances when the respondents at one stage or the other resorted to overdrawal of power from the regional grid at a frequency lower than that prescribed under IEGC and the Commission's directions, making the regional grid vulnerable to collapse. The petitioner was supported by the representative of Southern Regional Electricity Board (respondent No.5). The representative of the Kerala State Electricity Board (respondent No.3) has submitted that it is following the provisions of IEGC and the directions issued by the Commission from time to time. The submission made has not been seriously contested on behalf of the petitioner.

4. The Commission has repeatedly drawn the attention of all concerned, including the constituents of Southern Region, to the consequences of overdrawal of electricity from the grid at a lower frequency than that prescribed under the IEGC to meet additional loads without arranging or contracting additional generation from other sources. The situation is getting aggravated day after day as more and more loads are connecting with passing time. It needs no emphasis that overdrawal of power from the grid at a low frequency results in tripping of the transmission lines and makes the system vulnerable to grid disturbances. The repeated occurrences of grid disturbances in State of Karnataka during the previous three months have been specifically brought to our notice. It adversely affects the generation of power besides causing damage to the plant and machinery installed at the generating stations in the entire region in an integrated grid as well as causing damages to the appliances used by millions of households. A case in point is Karnataka's own Raichur Thermal Power Station, which is tripping repeatedly due to similar reasons. We, therefore, feel concerned and the Commission has been impressing upon all concerned the need for remedying the malady of overdrawal. The situation brought to our notice by the petitioner through the petition and also before us at the hearing, is dismal. We are satisfied that unless certain drastic measures are taken, the situation is unlikely to improve. In the interest of security and safety of the regional grid, we, therefore, feel that some parts of the States indulging in overdrawals have to be isolated/islanded and supplied from the State's own resources at whatever frequency they want to operate at the risk of their own machinery & equipment, but not through the Inter-State Transmission System or Inter-State Generation System. The remaining part limited to the peak load capacity of their share

in Central generation is to operate as integrated to the inter-connected Southern Grid operating within the parameters of IEGC. This is required because the gravity of the situation calls for extreme steps to stop certain constituent(s) of Southern Regional grid indulging in reckless overdrawals at a low frequency. However, before actually passing the directions, we feel that the technical aspects of isolation of one or more parts of the State from the regional grid should be considered in greater detail. We, therefore, consider that a Committee with Member (GO), CEA as Chairman and Shri Bhanu Bhushan, Director, incharge of CTU functions, PGCIL and Shri Rakesh Nath, Chairman Bhakhra Beas Management Board as Members may go into the technical and commercial aspects of isolating/islanding some parts of the system, without damage to the Regional grid, in detail, and submit a report to the Commission by 31.7.2002. Shri Rakesh Nath has been specially selected on the basis of rich experience as a Grid Operator. The state utilities operating in the Southern Region shall be given opportunity to express their views on the issues. Member Secretary, SREB and the states in southern region shall render all necessary co-operation to the Committee in the study.

5. A copy of this order be sent to Secretary, Ministry of Power, Chairman CEA and CMD, PGCIL and Chairman BBMB.

6. A copy of this order may also be sent to the Secretary (Power) of the constituent state(s) in the Southern Region.

7. The matter may be placed before the Commission by 7.8.2002 on receipt of report of the Committee for further directions.

**Sd/-**  
**(K.N. Sinha)**  
**Member**

**Sd/-**  
**(G.S. Rajamani)**  
**Member**

**Sd/-**  
**(D.P. Sinha)**  
**Member**

**Sd/-**  
**(Ashok Basu)**  
**Chairman**

New Delhi dated the 26<sup>th</sup> June 2002