

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:  
Dr. Pramod Deo, Chairperson  
Shri V.S.Verma, Member  
Shri M.Deena Dayalan, Member**

**DATE OF HEARING : 9.4.2013**

**Petition No. 221/MP/2012**

Sub: Providing adequate load shedding through automatic under frequency and df/dt relays in the state systems of Northern region and keeping them functional in terms of Regulation 5.2 (n) of the Central Electricity Regulatory Commission ( Indian Electricity Grid Code) (first amendment), Regulations 2012 for ensuring security of the Northern regional grid as well as the interconnected Indian grid.

Petitioner : Northern Regional Load Despatch Centre, New Delhi

Respondent : Punjab State Transmission Corporation Ltd. & others

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

Sub : Maintaining and ensuring integrated, secured grid operation in Southern Region in terms of regulation 5.2 of the Central Electricity Regulatory Commission 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.

Petitioner : Southern Regional Load Dispatch Centre, Bangalore

Respondents : Transmission Corporation of Andhra Pradesh Ltd. & Others

Parties present : Shri V.V Sharma, NRLDC  
Shri Rajiv Porwal, NRLDC  
Shri Vikas Sharma, NRLDC  
Shri V. Suresh, SRLDC  
Shri Raghav Chandha, Advocate, J&K,PDD  
Shri Vikas Sharma, J & K  
Shri S.K. Sharma, DTL  
Shri Paritosh Joshi, DTL  
Shri B.S. Bairwa, NRPC  
Shri Vijay Kumar, NRPC  
Shri Satish Kumar, PTCUL  
Shri Darshan Singh, SLDC,Delhi  
Shri Kavindra Singh, UPPTCL  
Shri M.K Tomar, RRVPNL  
Shri Satbir Singh, SRPC  
Shri Anand K. Ganeshan, KPTCL  
Shri S. Vallainayagam, Advocate for TANTRANSCO

### **Record of Proceedings**

1. The representative of NRLDC submitted as under:
  - (i) The details of compliance report for time schedule for procurement/ rectification of all the relays in the Northern Region have been received from the States of Delhi, Rajasthan, UP, Punjab on 15/3/13 Uttarakhand on 25/3/2013 and Haryana 5/4/2013.
  - (ii) The compliance reports have been examined and rejoinders to replies have already been filed.
  - (iii) No response has been received from the States of Himachal Pradesh and J&K and UT of Chandigarh.
  - (iv) Lot of discrepancies have been observed in compliance report submitted by respondents. As per Regulation 5.4.2 (e) of Grid Code, UFR, df/dt relays should be installed on radial feeders. Feeders should be arranged in four groups for scheduled power cuts/load shedding, Loads for unscheduled load shedding. Loads to be shed through under frequency relays relays and loads to be shed under any System Protection Scheme. There should not be any over lapping between different groups of loads.
  - (v) The Commission may direct the respondents, namely State of Himachal Pradesh, Jammu and Kashmir and UT Chandigarh to submit the information

regarding installed df/dt and Under Frequency Relays in their respective systems and to rectify the identified deficiencies in a time bound manner;

- (vi) The Commission may direct all the respondents to carry out field verification and validation of df/dt and Under Frequency Relays based scheme installed in their system, every six month to ensure their healthiness and functionality at all times in terms of Regulation 5.2 (n) of the Grid Code

2. The representative of NRPC requested the Commission to issue directions to the States of Himachal Pradesh, UT, J&K and Chandigarh, for submission of quantum of relief through UFR and df/dt. He further submitted that Inspection on quarterly basis is being done by NRPC.

3. Learned counsel for the J&K submitted that reply to the petition would be filed shortly.

4. Representative of SRLDC submitted that:

- (i) SR Constituents have initiated action in response to RoP dated 14.02.2013.
- (ii) In the Protection committee meeting of SRPC, all SR constituents agreed & confirmed the quantum finalized by SRPC as appropriate.
- (iii) Andhra Pradesh & Tamil Nadu confirmed for considering feeder wise average load for their declaration. They have identified additional feeders and suitable relays are yet to be installed in these feeders. However AP & TN have to furnish the updated list of feeders with revised quantities. Action plan for bridging the gap pf balance quantity in a time bound manner.
- (iv) KPTCL identified additional feeders, but yet to confirm the declaration considering minimum/ average load of respective feeders as well as furnish the updated list with revised quantum on each feeder. KSEB monitors for maximum & average value of load available in the identified feeders. However the declaration is still based on maximum value and it results in 40%- 60% of availability of loads. Particularly in the case of Kerala, the difference between Maximum & Minimum load as well as minimum load duration is significantly high. Therefore, it may be appropriate to consider minimum load available for relief from such feeders.

5. Accordingly, SRLDC pray that the all SR Constituents may be directed

- (i) to furnish updated list of feeders with revised feeder-wise load details considering minimum/average load that may be normally available for relief through AUF and df/dt protection.
  - (ii) to furnish time bound action plan for ensuring AUF and df/dt implementation to the quantum finalized in the Protection Coordination Committee meeting of SRPC.
  - (iii) to make available data of such identified feeders to SRLDC for monitoring and reporting to the Commission.
6. After hearing the parties present, the Commission reserved order in the petitions.

**By order of the Commission**

**-Sd-  
(T. Rout)  
Joint Chief (Law)**