

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 265/MP/2012**

Sub: Miscellaneous Petition for approval under Regulation-24, 111 & 113 of the CERC (Conduct of Business) Regulations, 1999 and under section 79(c), (d), (i) and (k) of Electricity Act-2003 for seeking direction for implementation Grid Security Expert System (GSES) on all India basis.

Date of Hearing : 5.3.2013

Coram : Shri S. Jayaraman, Member  
Shri V.S.Verma, Member  
Shri M.Deena Dayalan, Member

Petitioner : Power Grid Corporation of India Ltd. (PGCIL)

Respondent : Himachal Pradesh State Electricity Board & Others

Parties present : Shri Sunil Kumar, PGCIL  
Shri A.S. Kushwaha, PGCIL  
Shri N. Nallarasana, NLDC  
Smt. Jyoti Prasad, POSOCO  
Shri S. Konar, ERLDC  
Shri V.Suresh, SRLDC  
Shri R.B. Sharma, Advocate JSEB & BRPL  
Shri Uday Shankar, NTPC  
Shri P.P. Francis, NTPC  
Shri S. K. Sharma, NTPC  
Shri Rohit Chhabra, NTPC  
Shri A.K. Mukherjee, NTPC  
Shri Somes Bandjopadhya, NTPC  
Shri A. Basu Roy, NTPC  
Shri Harpreet Sethi, NTPC  
Ms. Shilpa Aggarwal, NTPC  
Shri B.S. Bairwa, NRPC  
Shri S. K. Meena, NHPC

**Record of Proceedings**

The representative of the CTU submitted as under:

- (a) As per Commission's direction, matter was discussed with RPCs. The constituents of Southern Region (SR), Eastern Region (ER) and North Eastern Region (NER) have agreed in principle on the proposal.

- (b) A meeting was convened in the WRPC. However, a copy of the minutes of meeting was not available , and
- (c) The constituents of Northern Region (NR) had some reservations and regarding GSES.

2. The representative of NRPC submitted that a special meeting was convenient to discuss the twin issues of Grid Security Expert System (GSES) and Automatic Demand Management Scheme (ADMS). However, there was no consensus in regard to implementation of GSES because of perceived duplicity between GSES and ADMS, additional expenditure, automatic injection reduction of generation, etc. Tata Power Distribution Company expressed that a distribution company complying with intra-State schedule might get affected by this scheme. In the NRPC meeting held on 17.1.2013, it was decided that NR constituents would send their views to PGCIL directly on the subject to resolve these issues.

3. The representative of the NERPC submitted that matter was discussed on 9.2.2013 in the TCC meeting of NERPC, and the following decisions were taken:

- (a) All constituents agreed in-principle to the technical requirement of the GSES scheme for NER grid;
- (b) There are no full fledged SLDCs in Arunachal Pradesh, Manipur, Mizoram and Nagaland;
- (c) Funding of the scheme was considered a major concern as NER States are financially weak;
- (d) The quantum of UFR based load shedding needed to be relooked for NER States; and
- (e) More deliberations on technical and commercial issues was required before formulation/implementation of the schemes.

4. Learned counsel for JSEB and BRPL submitted that the petition was premature due to following reasons:

- (a) Maintaining grid security is the responsibility of POSOCO. However, present petition has been filed by CTU.
- (b) There are issues of duplicity and funding of the scheme;
- (c) As the defence system already exists, there is no need for putting more defence systems.

- (d) POSOCO is not implementing the relevant regulations to make the grid secure.
- (e) Cost of scheme has not been approved by the Board of Power Grid.
- (f) Cost benefit analysis has not been furnished by the petitioner to the respondents.

5. The representative of SRPC submitted that in the special meeting of TCC held on 11th and 12th of February, 2013, the following decisions were taken:

- (a) Implementation of GSES in Southern Region was agreed in principle;
- (b) Funding of GSES was requested to be carried out through PSDF;
- (c) Detailed engineering of GSES should be done in consultation with the States for finalization of BaQ; and
- (d) SLDC should have overriding powers to decide the feeders etc.

6. The Commission observed that all the technical issues should have been discussed and sorted out at RPC level. The Commission directed the learned counsel for JSEB/BRPL to submit the views of his clients in writing. If more constituents submit similar objections, NRPC shall discuss the issue in the Technical Committee Meeting and resolve them.

7. The representative of NTPC submitted that in any power system there are two levels of action to ensure safe and secure operation of the Grid viz a layer of control system and a protection system. The power system is designed considering credible contingencies and the control system as designed should ensure that the system operates with the desired degree of reliability. The protection system comes into play only when the control system fails to achieve its function or when events far in excess of the credible contingencies occur. Various reactive emergency protection actions identified in the petition should rather be handled through proactive measures in normal situations so that such emergencies do not occur. Therefore, emphasis should be to evolve an adequate control system comprising adequate secondary controls.

8. The Commission directed to CTU to submit the following on affidavit by 16.4.2013:

- (a) Clear demarcation between Automatic Demand Management Scheme and GSES, indicating voltage level at which both the schemes will operate; and
- (b) Duplicity, if any, between the two schemes, in general and particularly with reference to optic fibre network proposed in Unified Load Despatch and Communication scheme.

9. The Commission directed learned counsel for JSEB and BRPL to file its reply on affidavit on or before 15.4.2013, with an advance copy to the petitioner. The petitioner was directed to file rejoinder, if any, by 26.4.2013.

10. NTPC was directed to file the technical issues, which need to be clarified, by CTU and discuss them in NRPC, on affidavit, with an advance copy to CTU on or before 15.4.2013, The CTU may file its response, by 26.4.2013.

11. The Commission directed NTPC and Distribution Companies to send their views to the petitioner, with advance copy to NRPC Secretariat, by 18.4.2013. NRPC Secretariat shall discuss these issues in its technical Coordination Committee meeting and submit the deliberations and conclusions to the Commission by 30.4.2013.

12. Subject to above, the Commission reserved order in the petition.

**By order of the Commission**

**Sd/-**

**(T. Rout)  
Joint Chief Legal**