

# CENTRAL ELECTRICITY REGULATORY COMMISSION

## Record of Proceedings

### PETITION No. 68/2010

Sub: Miscellaneous petition under Regulations 44 " Power to Relax" of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 for relaxation of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 for fixation of tariff norms for recovery of cost for the assets (Communication system and SLDC system) to be retained/to be installed after formation of POSOCO for the period from 2009-14.

Date of hearing : 23.11.2010

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

Petitioner : Power Grid Corporation of India Ltd., Gurgaon

Respondents Bihar State Electricity Board, Patna & Others

Parties present : Shri S.K.Sonee, POSOCO  
Shri N.S.Sondha, PGCIL  
Shri A.S.Kushwaha, PGCIL  
Shri U.K.Tyagi, PGCIL  
Shri M.M.Mondal, PGCIL  
Shri R.Prasad, PGCIL  
Shri R.B.Sharma, Advocate, BSEB  
Shri V.K.Jain, TNEB  
Shri R.P.Agarwal, UPPCL  
Shri K.K.Agarwal, MPPTCL

Through this petition, the petitioner, Power Grid Corporation of India Limited has prayed for determination of tariff of the communication system of the Central Transmission Utility (CTU) with certain modifications in Depreciation, Operation and Maintenance and time line for completion of project under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ( the 2009 regulations) for the communication system and SLDC system of the CTU by exercising the power of relaxation under Regulation 44 of the 2009 regulations.

2. At the outset, the representative of the petitioner submitted that there were two main issues, namely amendment of 2009 regulations or invocation of the power of relaxation under Regulation 44 of the 2009 Regulations to include provisions related to communication system and replacement of existing microwave links under the Unified Load Despatch & Communication (ULDC) with Fibre Optic based communication system.

3. The learned counsel for the Bihar State Electricity Board (BSEB) submitted the following:

(a) The provisions of Regulation 44 of the 2009 regulations regarding power to relax can be invoked for relaxation of the provisions which are existing in the statute, but can not be invoked for the non-existent provisions in the regulation;

(b) The Department of Telecommunication (DoT), Govt. of India directed to vacate the frequency for the Microwave links under the ULDC scheme neither in discharge of any sovereign function nor for any security reasons but purely for commercial consideration. Therefore, DoT should be asked to give commercial compensation for vacating the frequency band;

(c) The economic feasibility of laying fibre optic cable by the petitioner should be examined by comparing it with the expenditure on lease of the fibre optic links already commissioned by BSNL, before granting regulatory approval for the project;

(d) The depreciation rate of 6.33% has been specified in the 2009 regulations for communication system with an useful life of 15 years and there is no need of any change in this regard;

(e) The time line of 30 months for executing the communication system projects with a projected life span of 5 to 6 years is not reasonable. In response to Commission's query, learned counsel for BSEB submitted that reasonable time line should be 8 to 9 months for laying the fibres and 2 months for other equipments. All these issues can be addressed if optical fibres are taken on lease from Bharat Sanchar Nigam Limited (BSNL).

4. The representative of the petitioner responded to the issues raised by the learned counsel for BSEB as under:

(a) The issue of vacation of the frequency band for microwave links and compensation from DoT has already been deliberated by taking up the matter with Ministry of Power and Department of Telecommunication, Government of India. The Department of

Telecommunication has declined to give any compensation for vacation of frequency band. Moreover, the allotment of frequency band is not for 15 years but on year to year basis requiring yearly payment;

(b) The frequency spectrum being used for Microwave links would be vacated in a phased manner. In response to query by the Commission it was clarified that the Microwave system would be replaced after a life span of about 4-9 years depending upon the commercial operation of ULDC schemes in different regions;

(c) BSNL network cannot be completely used, since the network does not reach all sub-stations. Moreover, there are issues of cyber security; and

(d) Though actual execution of communication project may not need 30 months time, the commissioning in co-ordination with other systems would require time up to 30 months, as proposed.

5. In response to the Commission's further query regarding the cost effectiveness of the petitioner's proposed system in comparison to the BSNL's system, it was clarified by the petitioner that the task force constituted under Shri Satnam Singh to look into the financial aspect for augmentation and up-gradation of State Load Despatch Centers and related issues recommended that the responsibility of owning and providing the communication system from sub-station to the nearest control centre as well as between control centers should continue to be retained with the CTU or STUs /SEBs. Only in case of any special requirement, Load Despatch Centers (LDCs) can assess, plan and take on lease such communication system from other telecom service providers. In view of the recommendation of the task force, only LDCs have the option for taking the communication system on lease.

6. In response to the Commission's query regarding the objections of the Uttar Pradesh Power Corporation (UPPCL), the representative of the petitioner submitted that as decided in Northern Regional Power Committee (NRPC), UPPCL is executing its portion on its own through public private partnership (PPP). However, UPPCL in its letter dated 23.10.2010 addressed to Chairperson, Managing Committee, Power System Development Fund (PSDF) has mentioned that completion of its portion within time schedule would be subject to availability of estimated amount of fund from PSDF. The representative of the petitioner requested the Commission to look into this matter.

7. In response to Commission's query as to whether the reliability of the Communication system has been properly deliberated, Chief Executive Officer of POSOCO submitted that in view of complexity and very fast development of power system, reliable communication system is vital. The power system should have its own dedicated communication along with backup. He emphasized the need for separate and reliable communication system for safe operation of the power system, implementation of new technologies such as PMU and Smart Grid etc. He further stated that due to non-availability of proper communication system at present, constraints have been observed in safe operation of the grid. As a result, PMUs in Northern Region were forced to be located where required communication system was available and not on the basis of optimum utilization for power system. He emphasized the need of a comprehensive regulation on communication system for power system.

8. While replying a query in regard to the signals which flows through the fibre optic and microwave communication systems, the representative of the petitioner submitted that these systems are used for data and voice communication and Power Line Carrier Communication (PLCC) is used for protection signals. In a few cases, the fibre optic system is also used for protection signals. The Chief Executive Officer, POSOCO submitted that the present communication system is not adequate and it needs augmentation to support integration of renewable to the grid, to implement new technologies, and to ensure better reliability and security and integration of systems developed by private players. He suggested that States might have their own communication network but Central Transmission utility should be given responsibility of inter-state communication system and overall planning as well as co-ordination for integrated communication system while State Transmission utility should be given responsibility for co-ordination at State level.

9. In response to the Commission's query regarding constitution of an expert group to suggest minimum requirements, learned counsel for BSEB submitted that an expert group can be constituted and as an interim measure, the communication system of BSNL may be taken on lease. He also submitted that BSEB did not have any objection on implementation of the communication system by the PGCIL if the cost was comparable with that for using BSNL system. He requested that 50% of the cost for replacement of microwave links with fibre optic links should be borne by the petitioner.

10. While replying to a query in regard to the utilization of 18 fibres, (other than 6 fibres to be utilized for Power system) in the fibre optical cable to be installed, the representative of the petitioner submitted that a few more fibres may be utilized by power system for PMU etc., and others may be utilized for commercial purposes. He accepted that for some

time, these 18 fibres may remain unutilized. He further submitted that if these fibres are leased out to other agencies, the leasing revenue would be reimbursed to beneficiaries. It was also mentioned that the sharing of cost has already been discussed with the Western Regional Power Committee and the marginal cost of 18 fibres instead of only 6 fibres would be about 10% only.

11. In response to the Commission's query in regard to claim of higher O&M, the representative of the petitioner submitted that O&M expenses allowed under ULDC scheme was provisional, and was to be adjusted against actual. Since, the O&M cost at this stage cannot be forecast, the O&M claimed in this petition is provisional subject to adjustment as per actual. In regard to Microwave frequency band, the representative of the petitioner submitted that Microwave frequency band is on pay and use basis and about ₹6 crore per year was being paid for this purpose.

12. The representative of the Madhya Pradesh Power Trading Company Ltd. submitted that before finalizing the regulations, the Commission should hold a public hearing. The Commission clarified that amendment to the regulations is made after seeking the suggestions/objections of the stakeholders.

13. The Commission directed the petitioner to submit the following details on affidavit latest by 20.12.2010, with an advance copy to the respondents:

- (i) Details of discussion in WRPC regarding sharing of cost of fibres;
- (ii) Copy of UPPCL letter dated 23.10.2010 addressed to Chairperson, Managing Committee, PSDF, regarding funding of UP portion of fibre optic project from PSDF; and
- (iii) Details of payment being made for using frequency band for Microwave links including the relevant supportive documents.

14. Subject to above, order in this petition was reserved.

sd/-  
(T. Rout)  
Joint Chief (Law)