CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.37 of 2010

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

Date of Hearing: 29.4.2010

Date of Order: 27.1.2012

In the matter of:

Petition under Regulation 24 read with regulation 111 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, seeking relaxation of the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of tariff) Regulations, 2009 under Regulation 44 of the said regulations.

And

In the matter of:

Power Grid Corporation of India Limited

.....Petitioner

Vs

- 1. Bihar State Electricity Board, Patna
- 2. West Bengal State Electricity Board, Calcutta
- 3. Grid Corporation of Orissa Ltd. Bhubaneshwar
- 4. Damodar Valley Corporation, Calcutta
- 5. Power Department, Govt. of Sikkim, Gangtok
- 6. Jharkhand State Electricity Board, Ranchi
- 7. Assam State Electricity Board, Guwahati
- 8. Meghalaya State Electricity Board, Shillong
- 9. Government of Arunachal Pradesh, Itanagar
- 10. Power and Electricity Department, Govt, of Mizoram, Aizwal
- 11. Electricity Department, Govt. of Manipur, Imphal
- 12. Department of Power, Govt. of Nagaland, Kohima
- 13. Tripura State Electricity Corporation Ltd., Agartala
- 14. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
- 15. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
- 16. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
- 17. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
- 18. Himachal Pradesh State Electricity Board, Shimla
- 19. Punjab State Electricity Board, Patiala
- 20. Harvana Vidyut Prasaran Nigam Ltd, Panchkula
- 21. Power Development Department, Govt. of J&K, Jammu



- 22. Uttar Pradesh Power Corporation Ltd., Lucknow
- 23. Delhi Transco Ltd, New Delhi.
- 24. Chandigarh Administration, Chandigarh
- 25. Uttarakhand Power Corporation Ltd., Dehradun
- 26. BSES Yamuna Power Ltd., New Delhi
- 27. BSES Rajdhani Power Ltd., New Delhi
- 28. North Delhi Power Ltd., New Delhi
- 29. New Delhi Municipal Committee, New Delhi
- 30. North Central Railway, Allahabad
- 31. Karnataka Power Transmission Corporation, Ltd. Bangalore
- 32. Bangalore Electricity Supply Company Ltd., Bangalore
- 33. Gulbarga Electricity Supply Company Ltd., Gulbarga
- 34. Hubli Electricity Supply Company Ltd., Hubli
- 35. Mangalore Electricity Supply Company Ltd., Mangalore
- 36. Chamundeswari Electricity Supply Company Ltd., Mysore
- 37. Transmission Corporation of Andhra Pradesh Ltd. Hyderabad
- 38. Eastern Power Distribution Company of Andhra Pradesh Ltd., Visakhapatnam
- 39. Southern Power Distribution Company of Andhra Pradesh Ltd., Tirupati
- 40. Central Power Distribution Company of Andhra Pradesh Ltd., Hyderabad
- 41. Northern Power Distribution Company of Andhra Pradesh Ltd.,
- 42. Kerala State Electricity Board, Thiruvanandapuram
- 43. Tamil Nadu Electricity Board, Chennai
- 44. Electricity Department, Govt. of Pondicherry, Pondicherry
- 45. Electricity Department, Govt. of Goa, Panaji
- 46. Madhya Pradesh Tradeco, Jabalpur
- 47. Madhya Pradesh Audyogik Kendra Vikas Nigam Ltd., Indore
- 48. M/s Jindal Powers Ltd., Noida
- 49. Maharashtra State Electricity Distribution Company Ltd., Mumbai
- 50. Gujarat Urja Vikas Nigam Ltd. Vadodara
- 51. Electricity Deptt. Administration of Daman and Diu, Daman
- 52. Electricity Deptt., Govt. of UT of Dadra and Nagar Haveli, Silvass
- 53. Chattisgarh State Power Distribution Co. Ltd. Raipur.

..... Respondents

Advocates/Representatives present:

- 1. Shri MG Ramachandram, Advocate
- 2. Shri U.K.Tyaqi, PGCIL
- 3. Shri Rajeev Gupta, PGCIL
- 4. Shri Pramod Choudhury, MPPTCL
- 5. Shri M.M.Mondal, PGCIL
- 6. Shri R.B.Sharma, Advocate, BSEB

ORDER

This petitioner, Power Grid Corporation of India Limited has filed this petition under Regulation 44 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter "the 2009 Regulations) for relaxation of relevant provisions of 2009 Regulations with regard to (a) Injection of equity during construction period; and (b) Initial spares as a percentage of the original transmission project cost.

Injection of Equity during construction period

2. The petitioner has submitted that the Commission has notified the 2009 Regulations which will remain in force for five years from 1.4.2009. In accordance with the said regulations, tariff based on capital cost of the transmission project shall be determined. As per Regulation 15 of 2009 Regulations, the base rate for Return on Equity has been specified as 15.5% and the timeline for construction of various transmission schemes has been specified at Appendix II to the 2009 Regulations. The petitioner has submitted that the transmission schemes for 400 kV and above voltage level systems as per the timeline generally span for a period of 36 months. However, as per Form 14 of Appendix I, Part III, Tariff Filing Forms (Transmission) of 2009 regulations, the drawal of debt and equity shall be on pari passu basis quarter wise to meet the commissioning schedule. Return on equity during the construction period is not allowed under 2009 regulations although as per para 8.2 of the Statement of Reasons, it has been recognized that "any investment deployed in the form of equity or debt has a cost to be serviced."

- 3. The petitioner has further submitted that the effective rate of RoE for a transmission scheme with a construction timeline of 36 months stands at 13.29% considering an average transmission project useful life of 30 years. In the event of transmission schemes involving new and complex technologies and taken up for the first time, the timeline may be upto 60 months and the effective base rate of RoE works out to 11.81% considering the average transmission project useful life of 30 years. The petitioner has cited sub section (e) of section 61 of the Electricity Act, 2003 (the Act) which provides that "safeguarding of consumers interest and at the same time, recovery of cost of electricity in a reasonable manner" shall be a guiding principle for determination of tariff. Further, the petitioner has also relied on para 5(3)(a) of the Tariff Policy, which provides that "balance needs to be maintained between the interests of consumers and the need for investments at par with, if not in preference to, other sectors so that the electricity sector is able to create adequate capacity. The rate of return should be such that it allows generation of reasonable surplus growth of the sector."
- 4. The petitioner has prayed that Note 1 under Form 14 of Appendix –I Part III of Tariff Forms (Transmission) may be relaxed by invoking the power under Regulation 44 of 2009 regulations to provide as under:
 - "Note 1: Drawal of debt and equity shall be on parri passu basis quarter wise to meet the commissioning schedule. Drawal of equity in the beginning is permissible. However, for transmission projects with time line beyond 36 months, the drawal of equity shall be during the last 36 months of the timeline."

Initial spares as a percentage of the original transmission project cost

- 5. The petitioner has submitted that the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "2004 regulations") provided for the initial spares in respect of the inter-State transmission system as under:
 - "52. Capital Cost: (1)The final tariff shall be determined based on the admitted capital expenditures actually incurred upto the date of commercial operaion of the transmission system and shall include capitalized initial spares subject to a ceiling norm as 1.5% of the original project cost."

The petitioner has submitted that in para 9.3 of the Statement of Reasons to 2009 regulations, though it has been stated that 'similarly for the hydro generating stations and transmission systems, the Commission has decided to continue with the existing norms' i.e. 2004-09 norms for initial spares to be applicable for 2009-14, the provisions of 2009 regulations reflect changes with respect to transmission system. The petitioner has submitted that under 2009 regulations, individual ceilings for transmission lines, sub-stations and Series Compensation devices and HVDC stations on account of capitalized initial spares were separately identified as against the norms of composite ceiling for initial spares during 2004-09. Though the petitioner has no problem with the separate identification of initial spares in respect of Series Compensation devices and HVDC stations on account of such reasons as requirement of relatively large number of items, long lead time being proprietary in nature and sourced from overseas, and high rate of obsolescence, bifurcation of the conventional AC systems into Transmission lines and substations and individual ceilings below the composite norms during 2004-09 is undermining the requirement of initial spares for the transmission projects. Moreover,

Gas Insulated Sub-Stations owing to their unique technology and high import content fall under the category of non-conventional systems and call for provisions of initial spares @ 3.5 % alongwith Series Compensation devices and HVDC stations.

- 6. Uttar Pradesh Power Corporation Limited (UPPCL), Bihar State Electricity Board (BSEB), and Tamil Nadu Electricity Board (TNEB), Respondent Nos. 1, 22 and 43 respectively, have filed replies to the petition.
- 7. UPPCL in its reply vide affidavit dated 26.3.2010 has submitted that under Form 14 of Appendix –I Part III of Tariff Forms (Transmission) to 2009 regulations, two types of data have to be supplied by the petitioner i.e. quarterly requirement of debt and quarterly requirement of equity from day one of the construction period to derive the IDC. Note 1 under Form 14 provides that debt and equity have to be treated on the principle of pari passu in the derivation of IDC. Pari passu has been defined in the Black's Law Dictionary as 'Proportionality', 'at equal pace', 'without preference'. Therefore, debt equity ratio for each quarter will be the same in so far as proportionality is concerned. UPPCL has submitted that in the context of the regulation, debt and equity shall be drawn in the same manner all over the construction period to maintain the debt equity ratio. UPPCL has further submitted that if equity is drawn during the last 36 months of the construction period, it will result in two situations viz. works suffer due to paucity of funds in the beginning which will inflate the timeline for construction and consequently give rise to larger amount of IDC, or additional debt requirement equivalent to the requirement of equity component is pumped to carry out work in time which means enhancement of equity. In both situations, it will result in increase in IDC contrary to the provisions of section 61(d) of the Act. As regards the initial spares,

UPPCL has submitted that as per the petitioner, the weighted average of initial spares of a typical inter-State transmission project as per the norms of 2009 regulations is 1.275%; however, the petitioner has not submitted the actual project wise data of initial spares expressed as a percentage of the project cost and certified by CA in support of its contention. Therefore, the prayer of the petitioner has no firm footing.

8. BSEB in its reply vide affidavit dated 30.4.2010 has submitted that the request of the petitioner in seeking the relaxation to allow the injection of equity during the last 36 months for the transmission projects whose timeline is beyond 36 months, is solely guided by the commercial considerations with the aim of not investing their equity in the initial period of construction of the transmission project. BSEB has further submitted that the request of the petitioner for relaxation of the 2009 regulations to allow initial spares as a percentage of the original projects as a whole @ 1.5% for the conventional systems and 3.5% for the non-conventional systems is soley guided by the commercial considerations with the aim to increase the capital cost and get more return on equity on this account than actually due in accordance with the 2009 regulations. It has been submitted that request of the petitioner should be considered against the background that the Commission has increased the base rate of RoE to 15.5% during the tariff period 2009-14 in comparison to the RoE of 14% applicable during 2004-09. BSEB has also submitted that neither the Act nor the tariff regulations framed by the Commission thereunder provide that each component and sub-component of the annual fixed charge be tested on the anvil of reasonability.

- 9. TNEB in its reply filed vide affidavit dated 4.6.2010 has submitted that the number of transmission lines and sub-stations have increased manifold due to addition of generation capacity and associated system strengthening works. Since the design of towers, capacity of transformers, etc. are standardized, there is no need for keeping spares for individual transmission line/substation and it is prudent to keep in a strategic place the required spares to cater to the replacement of damaged or defective assets in more than one line section or sub-station. TNEB has submitted that as there would be reduction in the quantum of spares due to growth of the system and standardization of the equipment, the Commission has rightly reduced the percentage of spares to be capitalized under the various heads. As regards the request of the petitioner for injecting equity during the last 36 months for the transmission projects whose timeline is beyond 36 months, TNEB has submitted that it is a normal practice to inject equity in the first instance to start the project without waiting for the loan sanction by the financial institutions and their drawal in order to complete the projects in the time schedule approved. Moreover, financial institutions also insist on ploughing of equity proportionate to the total expenditure to sustain interest of the promoter in the project. TNEB has also submitted that the request of the petitioner for permission to inject equity during the last 36 months of the transmission project whose timeline is more than 36 months may be rejected as it is neither in the interest of the end consumers nor from the point of view of the financial institutions.
- 10. During the hearing of the case on 30.3.2010, the petitioner was directed to explain the provision of the law under which the petition was filed. The learned counsel for the petitioner during the hearing on 29.4.2010 submitted that the issues raised and relief

prayed for by the petitioner in the present petition can be entertained and redressed by the Commission by virtue of: (a) the very nature of powers the Commission exercises as a Regulator; (b) the power to relax; (c) exercise of inherent powers; and (d) power to modify regulations etc. which have been retained by the Commission in the 2009 regulations and also in the Conduct of Business Regulations. The learned counsel submitted that the Commission exercises regulatory powers which have been held to be wide and all encompassing by the Hon'ble Supreme Court in UP Power Corporation Ltd. Vs. National Thermal Power Corporation Ltd. [(2009) 6 SCC 235]. Learned counsel further submitted that the Commission has wide powers to rectify any inequity and in support of his contention referred to Regulation 44 of the 2009 regulations dealing with "power to relax", Regulations 111 to 113(Saving of inherent powers of the Commission), Regulation 114 (General power to amend) and Regulation 115 (Power to remove difficulties) of Conduct of Business Regulations. Learned counsel also submitted that the discretion conferred by these powers is of the nature of judicial discretion which is to be exercised by the Commission on the basis of the facts and circumstances of each case. In this connection, learned counsel relied on the judgement of the Hon'ble Supreme Court in Hindustan Steels Limited v. A. K. Roy {(1969) 3 SCC 513} and the judgements of the Appellate Tribunal for Electricity in NTPC Ltd. V. Madhya Pradesh State Electricity Board [2007 ELR APTEL 7] and MP Trading Company Limited v. Torrent Power Limited & Ors {2009 ELR APTEL 124}.

11. Learned counsel for the petitioner in the written submission dated 11.5.2010 has submitted that the norms and parameters specified in the 2009 regulations are based on the performance of the transmission activities of the petitioner's transmission

activities in the normal circumstances and on the assumption that it will function in the normal manner during 2009-14 also. However, the norms and parameters in the 2009 regulations have not considered the peculiar, special and distinguishing aspects of transmission systems involving new and complex technologies such as 765 kV D/C transmission systems, +/- 800 kV HVDC transmission systems which are proposed to be constructed during 2009-14 period. Therefore, the time required for completion of such projects would be much more than 36 months and is expected to be upto 60 months. In order to bring such projects on parity and being governed by the same principles as applicable to the project of 36 months, it will be necessary to adopt a course of deviation from the regulations. Therefore, there is a case and justification for exercise of power to relax to grant relief to the petitioner.

12. We have considered the submission of the petitioner and the respondents. First we take up the question of maintainability of the petition. The petition has been filed under the following provisions of Conduct of Business Regulations and Regulation 44 of the 2009 regulations which are extracted as under:

Regulation 24 and 111 of Conduct of Business Regulations

- "24. The Commission may initiate any Proceedings suo motu or on a petition filed by any affected or interested person."
- "111. Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary for the ends of justice or to prevent the abuse of the process of the Commission."

Regulation 44 of the 2009 Tariff Regulations

"44. Power to Relax: The Commission for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person."

In response to our query during the hearing of the petition on 30.3.2010, the petitioner has submitted that the Commission can entertain the petition under Regulation 44 of the 2009 regulations dealing with "power to relax", Regulations 111 to 113(Saving of inherent powers of the Commission), Regulation 114 (General power to amend) and Regulation 115 (Power to remove difficulties) of Conduct of Business Regulations.

- 13. There is no denying the fact that the Commission exercises various powers under the provisions of the Act, the Conduct of Business Regulations and other regulations issued by the Commission including the tariff regulations. The powers of the Commission to exercise jurisdictions in different circumstances have been upheld by the Hon'ble Supreme Court in UP Power Corporation Ltd. Vs. National Thermal Power Corporation Ltd. [(2009) 6 SCC 235] and Appellate Tribunal for Electricity in NTPC Ltd. V. Madhya Pradesh State Electricity Board [2007 ELR APTEL 7} and MP Trading Company Limited v. Torrent Power Limited & Ors {2009 ELR APTEL 124}. However, the question for consideration is whether the issues raised by the petitioner in the present petition can be considered under the power to relax or power to remove difficulty or the inherent power of the Commission. For this we need to consider the nature of the issues and the prayer of the petitioner.
- 14. The first issue pertains to permission for injection of equity during last 36 months of the construction where the timeline of the projects stretches beyond 36 months. The main reason for such a prayer is that the effective rate of RoE for a transmission scheme with a construction timeline of 36 months would be 13.29% and with a timeline

upto 60 months, effective base rate of RoE would be 11.81% considering the average useful life of the transmission project as 30 years. Since the petitioner expects to lose on the effective rate of RoE in case of projects with a timeline of more than 36 months, it wants to fund the project entirely through debt initially and invest the equity during last 36 months. The petitioner has not explained in what way the proposed change in the deployment of funds for the project would be in the interest of the consumers. On the contrary, such an approach towards deployment of funds will add to the burden of the consumers in the form of enhanced IDC. Let us assume that the timeline for a project of new and complex nature is 56 months. As per the formulation of the petitioner, it will fund the proportionate cost of the project during first 20 months through debt only which will earn interest and will be capitalized and serviced in the debt equity ratio of 70:30. The petitioner would invest 30% equity elsewhere and earn interest which it would otherwise have invested in the project during the first twenty months on the principle of pari passu. The petitioner will invest the said 30% equity during the last 36 months additionally to maintain the debt equity ratio of 70:30. However, a comparison of the liability for IDC under the present system of funds deployment and the proposed system of funds deployment would reveal that the consumers will end up in paying more IDC under the proposed system of deployment of funds. We also agree with the submission of TNEB that financial institutions normally insist on ploughing proportionate share of equity by the investor before funding the debts. It is to be noted that after 6.1.2011, all transmission lines are to be implemented through international competitive bidding except where PPAs have been signed prior to that date. Therefore, the project developer shall factor in all such risks while bidding for the project. It is not the case of the petitioner that the projects cannot be implemented without adoption of the proposed

deployment of funds. In our view, no case has been made out for relaxation under Regulation 44 of 2009 regulations or under the inherent power of the Commission.

- 15. The second prayer is that Regulation 8 of 2009 regulations should be relaxed to allow ceiling of spares for the transmission project as a whole @ 1.5% of the original project cost for conventional system and 3.5% for the non-conventional system like Series Compensation devices, HVDC stations and Gas Insulated system. The petitioner has relied upon the last sentence of para 9.2 of the Statement of Reasons in support of its contention that ceiling norms of 1.5% of the original project cost as was prevalent during 2004-09 for the composite transmission system should be retained for the transmission line. First of all, the submission of the petitioner on this count is not acceptable for the reason that the Statement of Reasons cannot supplant the provision of the regulations and in case of inconsistency, the regulations shall prevail. Moreover, the words 'existing norms' need to be understood in the context it has been used. Para 9.2 of the Statement of Reasons states as under:
 - "9.3. The Commission is of the view that actual availability of coal and gas/liquid fuel based stations is in excess of 85% barring few stations like Farakha and Gandhar etc., that too, for certain specific reasons. Moreover, the Commission is not putting any bar on the generators to keep the sufficient inventory as considered necessary by them. But for capitalization of initial spares which are provided to take care of mandatory and insurance spares requirements at the time of commissioning of the project and to arrange for its financing, we are of the view that the specified norms are sufficient and do not call for any further increase. Similarly for the hydro generating stations and transmission systems, the Commission has decided to continue with the existing norms." (emphasis supplied)

It is clear from the above that the Commission had come to the conclusion that the specified norms in the draft regulations for thermal generating stations were sufficient and did not call for any increase. Similar treatment has been accorded for the hydro generating station and transmission system. Therefore, the existing norms appearing in

the last sentence would take colour from the preceding sentence and would only mean norms specified in the draft regulations. In our view, there is no scope for assuming that the existing norms referred to the norms specified in the regulations for 2004-09. There is another reason why the interpretation of the petitioner cannot be accepted. The ceiling of spares for HVDC system has been specified in the 2009 regulations only and therefore, 'existing norms' in the Statement of Reasons can only refer to the norms specified in the draft regulations.

16. Note 1 under Form 14 of Appendix -I Part III of Tariff Forms (Transmission) to 2009 regulations dealing with deployment of equity and funds on pari passu basis and Regulation 8 of the 2009 regulations were specified after following the due procedure established by law i.e. publishing the draft regulations, inviting comments of stakeholders, holding public hearing and after considering the objections and suggestions received in response to draft regulations. Any change in the regulations can be brought about by amendment which will require the same process to be followed. As regards the relaxation of the provisions of the regulations, the same is resorted to in exceptional cases if the Commission is satisfied that the operation of the regulation causes hardship to a party or results in injustice to him or application of the regulations leads to unjust results. In the present case, the petitioner has not been able to make out the case that the norms for the transmission lines are unreasonable or have caused great hardship to the petitioner or the operation of the norms have led to unjust results. Therefore, we dismiss the prayers of the petitioner with regard to relaxation of the norms for the transmission lines.

17. The petitioner has submitted that the Gas Insulated Sub-Stations owing to their unique technology and high import content fall under the category of non-conventional systems and should be allowed initial spares @ 3.5 % as in the case of Series Compensation devices and HVDC stations. We have considered the submission of the petitioner. GIS is comparatively a new technology and the spare requirement may be project specific, which would result in higher initial spares. Further, the GIS equipments are imported and costlier as compared to conventional sub-station. Therefore, there is a requirement of higher ceiling for GIS systems. We notice that 2009 regulations do not contain any norms for GIS equipments. Accordingly, we direct the staff of the Commission to consider the requirement of spares in respect of the GIS equipment while processing the case for amendment of the 2009 regulations in future.

18. Petition No.37 of 2010 is disposed of accordingly.

Sd/(M Deena Dayalan)
Member

Sd/-(S Jayaraman) Member