CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.226/2009

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri M.Deena Dayalan, Member Shri A.K.Singhal, Member

Date of Hearing: 6.3.2014 Date of Order: 25.6.2014

IN THE MATTER OF

Approval of tariff of Jhanor Gandhar Gas Power Station (657.39 MW) for the period from 1.4.2009 to 31.3.2014 in terms of the judgment of the Appellate Tribunal for Electricity dated 25.10.2013 in Appeal No. 71/2012.

And in the matter of

NTPC Ltd NTPC Bhawan, Core-7, SCOPE Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003

Petitioner

Vs

- 1. Madhya Pradesh Power Trading Company Ltd., Jabalpur
- 2. Maharashtra State Electricity Distribution Co. Ltd, Mumbai
- 3. Gujarat Urja Vikas Nigam Ltd, Vadodara
- 4. Chhattisgarh State Power Distribution Company Ltd, Raipur
- 5. Electricity Department, Govt. of Goa, Panaji, Goa
- 6. Electricity Department, Administration of Daman & Diu, Daman
- 7. Electricity Department, Administration of Dadra and Nagar Haveli, Silvassa

.....Respondents

Parties present:

Shri M.G.Ramachandran, NTPC Ms. Anusree Bardhan, Advocate, NTPC Shri Ajay Dua, NTPC Shri Rohit Chhabra, NTPC
Shri Y.R. Dhingra, NTPC
Shri Rajesh Jain, NTPC
Shri A.S.Pandey, NTPC
Shri Sachin Jain, NTPC
Shri A.K.Chaudhury, NTPC
Shri Sameer Aggarwal, NTPC
Shri V.K.Garg, NTPC
Shri P.Piyush, NTPC
Shri Ajasra Gupta, MPPMCL

ORDER

The above said petition was filed by the petitioner, NTPC for approval of tariff for Jhanor Gandhar Gas Power Station (the generating station) for the period from 1.4.2009 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ("the 2009 Tariff Regulations") and the Commission by its order dated 30.12.2011 determined the annual fixed charges of the generating station for the said period.

- 2. Against the order dated 30.12.2011, the petitioner filed Appeal No. 71/2012 before the Appellate Tribunal for Electricity ('the Tribunal') on the following issues:
 - (a) Life extension of Gandhar Station Gas Turbines for a period of 15 years instead of 10 years as proposed;
 - (b) Disallowance of capital expenditure of ₹795 lakh on Air Inlet Cooling system for Gas Turbines:
 - (c) Recovery of un-recovered depreciation of the asset value prior to R&M activities; and
 - (d) Considering the total de-capitalisation amount of ₹25029 lakh instead of ₹19278 lakh as submitted in affidavit by NTPC

- 3. As the issues raised in this appeal were similar to the issues raised in another appeal (Appeal No.70/2012) filed by the petitioner in respect of Kawas GPS, the Tribunal by a common judgment dated 25.10.2013 disposed of the said appeals.
- 4. On the issues raised by the petitioner in para 2 (c) and (d) above, namely, the recovery of un-recovered depreciation of the asset value prior to R&M activities and the consideration of the total de-capitalisation amount of ₹25029 lakh instead of ₹19278 lakh, the Tribunal rejected the submissions of the petitioner and confirmed the findings of the Commission in the said order dated 30.12.2011. However, on the issue of life extension of Gas Turbines for 15 years in para 2 (a) above, the Tribunal decided as under:
 - "24. It is clear from the table given in the impugned order in paragraph 61 that, the useful life of Gas Turbine I. II & III at Gandhar after extension of life by 15 years has been considered as 32.08, 31.75 and 32.08 years respectively while the life of steam turbine has been taken as 25 years. Accordingly, the weighted average useful life of the gas based power station after extension of useful life of Gas Turbine has been computed as 29.59 years in the impugned order. Similarly in case of Kawas the useful life of the gas turbines IA, IB, 2A and 2B on life extension after R&M has been considered as 35.83, 35.67, 35.58 and 35.42 year respectively and for steam turbine as 25 years. Accordingly, for Kawas the weighted average life of the gas station has been computed as 29.59 years in the impugned order. This is against the intent of the Regulations for enhancing the useful life of the gas turbine to 25 years on Renovation after completing 15 years of useful life. No reason has been given by the Central Commission for enhancing the useful life of the gas turbines by 15 years after R&M over the elapsed life as on 1.4.2012 instead of 10 years as intended in its Tariff Regulations, 2009. We feel that the useful life of the Gas Turbines should have been extended by 10 years after completion of the Renovation of the Gas Turbines as per the Regulations. Accordingly, decided.
 - 25. Therefore, we decide to remand this matter back to the Central Commission with direction to re- determine the useful life of the plants after extension of life by 10 years for GTs after completion of Renovation and Modernization, instead of 15 years"

- 5. On the issue of disallowance of capital expenditure of ₹795 lakh on Air Inlet Cooling system for Gas Turbines as in para 2 (b) above, the Tribunal held as under:
 - "37. The Central Commission should have decided this issue strictly on the basis of its Regulations. The norms for heat rate are decided by the Central Commission in its Regulations and the same could not be decided by NTPC. Therefore, we direct the Central Commission to decide the issue according to its Regulations after considering whether the expenditure on Air Inlet Cooling System is required for renovation of gas turbine or necessary due to obsolescence or non-availability of spares for successful and efficient operation of the gas station, after hearing the concerned parties."
- 6. In compliance with the directions of the Tribunal on remand, this petition, along with petition related to Kawas GPS was heard on 6.3.2014. During the hearing, the learned counsel for the petitioner prayed that revision of tariff of this generating station may be undertaken at the time of truing-up of tariff in terms of Regulation 6(1) of the 2009 Tariff Regulations considering the said judgment of the Tribunal. The respondent No.1 MPPMCL did not oppose the prayer of the petitioner. The Commission accepted the prayer of the learned counsel for the petitioner and directed the petitioner to submit on affidavit, the details as to the increase in capacity of the plant after installation of Air inlet cooling system and the improvement in Heat Rate/Efficiency on account of the installation of Air inlet cooling system, in the truing-up petition to be filed by petitioner for revision of tariff for 2009-14 for consideration.
- 7. As regards determination of balance useful of the generating station as on 1.4.2009 after R&M, the Commission in its order dated 30.12.2011 had decided as under:

Balance useful life of the generating station as on 1.4.2009 after R&M for the purpose of Depreciation

61. The details of the date of commercial operation of the different units of the generating station, the period of operation up to 1.4.2009 and 1.4.2012 (completion of major R&M works) and the extended life after R&M of Gas Turbine and their weighted average period of operation on above dates and weighted average life are as under:

Description	Capacity MW	COD	Elapsed life up to 1.4.2009	Elapsed life as on 1.4.2012	Useful life after extension of life by 15 years for GTs
GT-I	144.30	1.3.1995	14.08	17.08	32.08
GT-II	144.30	1.7.1995	13.75	16.75	31.75
GT-III	144.30	1.3.1995	14.08	17.08	32.08
ST-I	224.49	1.11.1995	13.42	16.42	25.00
Total	657.39		13.78	16.78	29.59

^{62.} The weighted average of the elapsed life (period of operation) of the generating station, as on 1.4.2009 works out to 13.78 years. The major part of R&M works would be completed by 31.3.2012. The weighted average of the period of operation of the generating station as on 1.4.2012 works out to 16.78 years. After the completion of R&M, the life of the Gas Turbine shall be extended by 15 years (approx) from the date of completion of major R&M i.e from 1.4.2012. However, the useful life of the Steam Turbine shall remain as 25 years from the date of commercial operation of the Steam Turbine unit. "

8. As per the judgment of the Tribunal, the useful life of the Gas Turbines should have been extended by 10 years after completion of R&M, instead of 15 years and the Commission has been directed to re-determine the same. It is noticed that Renovation & Modernization of Gas Turbine has not yet been completed and the same is expected to be completed by the petitioner during the tariff period (2014-19). In view of this, the redetermination of useful life of Gas Turbines and consequent revision of tariff of the generating station for 2009-14 would be considered after completion of R&M activities in compliance with the judgment of the Tribunal. The petitioner is accordingly directed to bring to the notice of the Commission the position of completion of R&M activities in order to redetermine the balance useful life of this generating station in terms of the judgment of the Tribunal. However, the expenditure of ₹795 lakh towards Air Inlet Cooling system for Gas

Turbines would be considered in terms of the directions of the Tribunal after considering the submissions of the petitioner in the truing up petition to be filed by the petitioner for 2009-14 in accordance with Regulation 6(1) of the 2009 Tariff Regulations.

Sd/-(A.K.Singhal) Member Sd/-(M. Deena Dayalan) Member Sd/-(Gireesh B. Pradhan) Chairperson