

No.: N/34/15

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION,
BENGALURU**

Dated : 1st December, 2016

Present:

Shri M.K. Shankaralinge Gowda	..	Chairman
Shri H.D. Arun Kumar	..	Member
Shri D.B. Manival Raju	..	Member

OP No. 16 / 2015

BETWEEN:

Sandur Power Company Private Limited,
No.56 B / 34, First Main,
Lower Palace Orchards,
Vyalikaval,
Bengaluru-560003

..

PETITIONER

[Represented by Shri Balakrishna Shastry, G, Advocate]

AND:

Mangalore Electricity Supply Company Limited,
MESCOM Bhavana,
Kavoor Cross Road, Bejai,
Mangaluru – 575 004

..

RESPONDENT

[Represented by ALMT Legal, Advocates]

ORDERS

1) The Petitioner in the present Petition has prayed for the determination of tariff at the rate of ₹4.16 per unit for the energy supplied from the eleventh year of the Power Purchase Agreement (PPA) dated 3.2.2004, executed between the Petitioner and the Respondent.

2) The material facts urged by the Petitioner in support of its case may be stated as follows :

- (a) The Petitioner is a Private Limited Company incorporated under the provisions of the Companies Act, 1956. The business of the Petitioner is generating hydro-electric power.
- (b) The Government of Karnataka, by its various orders, accorded permission to the Petitioner to set up a 22.5 MW capacity Mini Hydel Generation project at Hosangadi Village, Kundapur Taluk, Udupi District and permitted the Karnataka Power Transmission Corporation Limited (KPTCL) to enter into an agreement with the Petitioner for purchase of electricity. Accordingly, the KPTCL and the Petitioner executed a Power Purchase Agreement (PPA) dated 3.2.2004. The Project was established and achieved commercial operation on 20.5.2005. The PPA was assigned to the Respondent- Mangalore Electricity Supply Company Limited (MESCOM) upon unbundling of the functions of the KPTCL, with effect from 10.6.2005.
- (c) The tariff agreed under the PPA was at the rate of ₹2.90 per unit (Base Tariff) for the energy delivered to the Sate Grid, with an escalation at the rate of 2% per annum over the Base Tariff every year. The annual escalation would be at the rate of ₹0.058 per unit. This tariff along with escalation would apply for the first ten years from the Commercial Operation Date (COD). In this way, the tariff at the end of the tenth year from the COD was ₹3.422 per unit.

- (d) That the PPA provided that, from the eleventh year onwards from the COD till the validity of the PPA, the rate would be re-negotiated between the parties, considering the various relevant factors, with due approval of the Commission.
- (e) The Petitioner has filed the present Petition on 26.5.2015, as there was no consensus between the parties on the tariff payable from the eleventh year onwards from the COD.
- (f) The Petitioner has urged the following grounds for claiming the tariff at ₹4.16 per unit from the eleventh year onwards of the PPA :
- (i) That as per the Detailed Project Report (DPR), the cost of the Project was ₹134.39 Crores and for recovery of such Project cost, the tariff for the energy should have been ₹3.37 per unit in the first year, whereas only ₹2.90 per unit was allowed, with an annual escalation of 2%, which has resulted in the Petitioner losing a sum of ₹130.72 Crores in the first ten years of the PPA. This has an impact on the tariff at ₹2.59 per unit.
- (ii) That a sum of ₹52.75 Crores is the probable expenditure towards renovation and modernization of the Project, to improve the efficiency of the Project. This has an impact on the tariff at 79 paise per unit.

- (iii) That the un-depreciated value after ten years of the PPA is ₹50.44 Crores. This has an impact on the tariff at ₹1.03 per unit.
- (g) Therefore, the Petitioner has claimed that it is entitled for a total tariff at ₹4.41 per unit for the remaining period of 10 years of the PPA. The Petitioner has stated that, as per the generic Tariff Order dated 1.1.2015, this Commission has fixed the tariff at ₹4.16 per unit for the energy purchased from the Mini Hydel Plants, therefore, the Petitioner has restricted its claim to ₹4.16 per unit. Hence, this Petition.
- 3) The Respondent has appeared through its counsel and filed its Statement of Objections. The gist of its contentions may be stated as follows:
- (a) That the execution of the PPA dated 3.2.2004 and the Mini Hydel Project of the Petitioner achieving the Commercial Operation on 20.5.2005 and the PPA was originally executed by KPTCL and subsequently assigned to the Respondent (MESCOM) with effect from 10.6.2015, are not disputed.
- (B) The Respondent has contended that, in view of the generic Tariff Order dated 11.12.2009 relating to the NCE Projects, the tariff payable from the eleventh year onwards from the COD in the present case would be the tenth year tariff for the remaining period of the PPA, without escalation. Further, that this Commission has adopted the same principle in other similar cases and in the

case of the Petitioner the tenth year tariff would be ₹3.422 per unit and the same would be payable to it from the eleventh year onwards from the COD.

- (c) The Respondent has specifically denied as false, the averments made in the Petition that, the cost of the Project was ₹134.39 Crores and that, for the first ten years of the PPA, the Petitioner could not recover a sum of ₹130.72 Crores from out of the Project Cost incurred and that a sum of ₹52.75 Crores was required for renovation and modernization of the Project to improve its efficiency and that the un-depreciated value after ten years of the PPA was ₹50.44 Crores. Therefore, the Respondent has contended that, the Petitioner is not entitled to any of the reliefs claimed in the Petition.

- 4) We have heard the learned counsel for the parties. The following issues would arise for our consideration :

- (1) Whether the Petitioner proves that, it had invested a sum of ₹134.39 Crores for establishment of the Mini Hydel Project?
- (2) Whether the Petitioner proves that, it had sustained a loss of ₹130.72 Crores during the first ten years of the PPA dated 3.2.2004?
- (3) Whether the Petitioner proves that, the renovation and modernization of the Mini Hydel Project was essential and that, a sum of ₹52.76 Crores was required for it?

- (4) Whether the Petitioner proves that, the un-depreciated value of the Mini Hydel Project was ₹50.44 Crores after ten years of the PPA dated 3.2.2004?
- (5) What should be the tariff payable to the Petitioner from the eleventh year onwards from the COD, for the remaining term of the PPA dated 3.2.2004?
- (6) What Order?
- 5) **ISSUE No:(1)** : *Whether the Petitioner proves that, it had invested a sum of ₹134.39 Crores for establishment of the Mini Hydel Project?*
- (a) The Project Cost incurred by the Petitioner is a material fact for resolving the dispute in this case. The Petitioner in its Petition does not say what was the actual Project Cost incurred by it for completion of the Mini Hydel Project. The Petitioner has repeatedly stated in its Petition that, the cost of the Project was ₹134.39 Crores as per the DPR. The pleadings of the Petitioner would show that, the total estimated Project Cost of ₹134.39 Crores as on the COD has been taken into account for claiming the tariff of ₹4.16 per unit from the eleventh year onwards from the COD. The Petitioner should have pleaded the actual Project Cost incurred and the same should have been proved by producing proper evidence. The Respondent in its Statement of Objections has denied the Project Cost of ₹134.39 Crores shown in the DPR or that amount was spent for the Project.

- (b) On consideration of the facts and circumstances of the case, it is not possible to accept the estimated Project Cost of ₹134.39 Crores as the actual Project Cost or the amount nearer to it for establishing the Project. It was envisaged in the DPR that, the cost of the Project would be ₹134.39 Crores as on the COD and the Plant Load Factor (PLF) would be 61%, resulting in an average annual generation at 120 Million Units (MU) and at the tariff of ₹3.85 per unit the Project would be economically viable with required returns. The DPR is prepared in the year 2001. The tariff of ₹3.85 per unit estimated in the DPR is stated in Paragraph-17.11 at Page-218 (Inked Page-297) of Volume-1 of the DPR, thus :

“17.11 Cost of Generation – Tariff Rates

17.11.01 *In order to make implementation of the project, economically viable, it is essential that all the essential expenditure, are met and adequate returns on the investment are ensured through generation of adequate revenues through sale of the Energy generated and are available for utilization.*

17.11.02 *A Power Purchase Agreement is being entered into with the Karnataka Power Transmission Corporation Ltd. with the sale rate stipulated for the year 1999-2000 at Rs.2.87 per unit sold. An annual escalation of 5% over the previous year's tariff is admissible for upto the 10th year after commissioning of all the units. The rate of sale will be Rs.3.85 in the 1st year after commission of units in the year 2005. Details of calculation of first year tariff as per Govt. of India norm, is enclosed as Appendix No.17.01.”*

(c) At another place in Volume-1 of the DPR [Page-(i), Inked Page-60], it is stated that:

(a)	Cost of energy generation per unit as per Government norms for the first year	..	₹3.37 per unit
(b)	Sale rate of energy generated as per the PPA.	..	₹3.85 per unit.

In the present Petition, the Petitioner has taken the cost of energy at ₹3.37 per unit for the purpose of calculating the amount anticipated as per the DPR during the first ten years of the PPA.

(d) Even assuming that the tariff of ₹3.37 per unit was the 'base tariff' required to make the Project financially viable as per the DPR prepared in the year 2001, the Petitioner entered into the PPA dated 3.2.2004 with the KPTCL, agreeing to supply energy at the rate of ₹2.90 per unit with an escalation of 2% per annum on the 'base rate' of ₹2.90 per unit, for a period of ten years from the COD. This tariff of ₹2.90 per unit with an escalation of 2% per annum agreed in the PPA dated 3.2.2004 is much less than the tariff of ₹3.37 per unit with an escalation of 5% per annum estimated in the DPR. Therefore, it would not have been a prudent act for the Petitioner to enter into the PPA dated 3.2.2004 with a tariff stated in the PPA. When the Petitioner voluntarily agreed to enter into the PPA dated 3.2.2004, it is presumed that, even that tariff was viable for the Petitioner. This would tend to show that the Project Cost estimated in the DPR was highly inflated for one or the other reason.

- (e) As per the DPR, the Project Cost per MW would be ₹5.97 Crores. This Commission by its generic Tariff Order dated 18.1.2005 has determined the Project Cost at ₹3.90 Crores per MW for Mini Hydel Projects and has also determined the tariff at ₹2.80 per unit without any escalation, for the first ten years from the COD. A number of Mini Hydel Projects have been established in the State of Karnataka as per the generic Tariff Order dated 18.1.2005 and they are still in operation. This would also indicate that, the tariff agreed under the PPA dated 3.2.2004 was viable to the Petitioner and therefore, it had entered into the PPA. The Project Cost estimated in the generic Tariff Order dated 18.1.2005 would also show that, the Project Cost estimated in the DPR was too high.
- (f) For the above reasons, the Project Cost stated in the DPR is not *prima facie* acceptable. Therefore, the Project Cost stated in the DPR cannot be treated as the actual Project Cost incurred by the Petitioner for completion of the Mini Hydel Project. As already noted above, the Petitioner has not produced any evidence to substantiate the actual Project Cost incurred by it.
- (g) The Project Cost of ₹3.9 Crores per MW for the Mini Hydel Projects estimated in the generic Tariff Order dated 18.1.2005 may be taken as the actual cost per MW incurred by the Petitioner for establishing its Mini Hydel Project. In that event, the total Project Cost would work out to ₹87.75 Crores. Therefore, we answer Issue No.(1) in the negative.

6) **ISSUE No:(2)** : *Whether the Petitioner proves that, it had sustained a loss of ₹130.72 Crores during the first ten years of the PPA dated 3.2.2004?*

(a) The calculation arrived at by the Petitioner to show that, it has incurred a loss of ₹130.72 Crores during the first ten years of the PPA, is as follows :

(i)	Units anticipated as per the DPR in the first ten years.	..	1,20,00,00,000
(ii)	Actual amount realizable at the rate of ₹3.37 per unit based on the DPR.	..	₹4,04,40,00,000
(iii)	Actual amount realized from sale of energy in ten years from the COD.	..	₹2,73.67,62,260
(iv)	Shrotfall of the amount realizable as per the DPR.	..	₹1,30,72,37,740

(b) From the amount realized from sale of energy during the first ten years of the PPA, we can say that, the actual energy generated for the first ten years comes to 85.79 Crore Units with a PLF of 43.5%. The DPR has projected a PLF of 61% for anticipating 120 Crores of units for the first ten years of the PPA. The shortfall had occurred because of the lower achievement of PLF. In the generic Tariff Order dated 18.1.2005 for Mini Hydel Projects, this Commission had estimated the PLF at 30%. The DPR discloses a PLF of 61%. The actual PLF achieved is 43.5%. The Petitioner cannot blame any other person for the achievement of the lower PLF of 43.5% as against the estimated PLF of 61%.

The Petitioner has not stated in its Petition that, the Respondent or any of the Government Departments was responsible for estimating a higher PLF of 61% in the DPR. On the other hand, after allotment of this Project, the Petitioner has executed an Agreement with the State Government, in which it is specifically stated that, the Petitioner itself would take up the investigation, on its own, by engaging Consultants in the Private Sector for collecting the relevant data for preparing the DPR and that the Government Department would not be, in any way, responsible for the correctness or otherwise of the data so collected from the different Offices of the Government, if any, by the Consultants of the Petitioner. This can be seen in the Agreement dated 29.6.1995 executed by the Petitioner with the Government of Karnataka, which is produced by the Petitioner in Volume-2 of the DPR. It can also be seen that, the relevant Department of the Government had estimated the capacity of the Mini Hydel Project of the Petitioner at 15 MW and the said Project was allotted by Government Order dated 6.9.1994 to the Sandur Manganese & Iron Ore Ltd., and subsequently it was transferred to its sister-concern, viz., the Petitioner herein. Thereafter, at the request of the Petitioner, the said capacity was increased to 22.5 MW. Therefore, the Petitioner cannot blame anybody else for achieving the lower PLF by its Mini Hydel Project. Therefore, one can reasonably assume that, the increase in capacity of the Mini Hydel Project to 22.5 MW and estimating the PLF at higher rate of 61%, seem to have been considered in the DPR to suit the inflated Project Cost. Considering the norms taken in the generic Tariff Order dated 18.1.2005 relating to the Mini Hydel Projects, one has to come to the conclusion that, the

Petitioner has realized more amounts in the first ten years' period of the PPA than what it should have realized on a normative basis.

- (c) For supply of electricity from the eleventh year onwards, the Petitioner vide letter dated 1.4.2015 (ANNEXURE-D) has stated that, the current tariff of ₹3.422 per unit was to be enhanced to a tariff of ₹4.16 per unit with an escalation at 2% per annum, as the Project required a thorough overhaul and renovation of the Generating Plants, which would be expensive. It may be noted that, the Petitioner does not say anything in this letter that it sustained loss of ₹130.72 Crores or any other amount during the first ten years of the PPA. Therefore, it can be inferred that, the sustenance of loss stated by the Petitioner is only an afterthought ground. If the Petitioner had actually incurred loss, that should have been in the knowledge of the Petitioner and the same should have been reflected in the letter dated 1.4.2015. For the above reasons, we are of the considered view that the Petitioner has failed to prove the loss stated by it and we answer Issue No.(2) in the negative.

- 7) **ISSUE No:(3)** : *Whether the Petitioner proves that, the renovation and modernization of the Mini Hydrel Project was essential and that, a sum of ₹52.76 Crores was required for it?*

- (a) The Petitioner has stated that, for renovation and modernization, a sum of ₹52.76 Crores was required. In support of it, the Petitioner has produced a Project Report on 'Renovation and Modernization' dated 10.4.2016 (ANNEXURE-K), said to have been prepared by Expert Project Engineer. In

Pararaph-24 of the Petition, it is stated by the Petitioner that, the Project though has completed ten years, the same has not undergone any major overhaul of the main machines, such as turbine and generator, and it was also found that the PLF has deteriorated after the fifth year, though some modification at site did improve but could not achieve the desired value. Further, it is stated that, therefore the proposed renovation and modernization was required. The Respondent has denied the statement made by the Petitioner in this regard as false and untenable.

- (b) Though the Report at ANNEXURE-K is styled, 'Project Report on Renovation and Modernization' Chapter-IV of the said Report would indicate the required repairs and overhaul of the parts of the generating plant and other infrastructure facilities of the Projects. Therefore, we are of the considered opinion that, the Report does not really relate on the question of 'renovating and modernization', but it only states regarding the repairs and overhaul of the generating plant. The periodic overhauls and repairs do not amount to renovation and modernization of the generating plant / Project. The expenses for periodic overhaul and repairs of the Plant / Project are factored in while fixing the tariff. Therefore, there would be no question of allowing a separate expenditure for the purpose of repairs and overhauls of the generating plant in the midst of the life of the Project, warranting any increase in tariff. The concept of renovation and modernization of an existing Plant is different from the periodic overhauls and repairs. Therefore, we answer Issue No.(3) in the negative.

- 8) **ISSUE No:(4)** : *Whether the Petitioner proves that, the un-depreciated value of the Mini Hydel Project was ₹50.44 Crores after ten years of the PPA dated 3.2.2004?*

The Petitioner has shown the calculation for arriving at the un-depreciated value of ₹50.44 Crores in Exhibit-III of ANNEXURE-I. The Petitioner has considered the original Project Cost at ₹134.39 Crores. As already observed by us while discussing Issue No.(1) above, the Project Cost may be taken, at best, at ₹87.75 Crores. In that event, the un-depreciated value of the Project after ten years from the COD would come to ₹32.93 Crores. Therefore, we hold that, the Petitioner has failed to prove that the un-depreciated value of the Project was ₹50.44 Crores after ten years of the PPA, but it may be taken at best at ₹32.93 Crores. Therefore, we answer Issue No.(4) in the negative.

- 9) **ISSUE No:(5)** : *What should be the tariff payable to the Petitioner from the eleventh year onwards from the COD, for the remaining term of the PPA dated 3.2.2004?*

- (a) The relevant portion of Article 5.2a of the PPA dated 3.2.2004 states that, from the eleventh year onwards from the COD, the Respondent shall pay to the Petitioner for the energy delivered, at a rate that would be negotiated between the parties, considering various factors with due approval of the Commission.

- (b) While determining the generic tariff in respect of Renewable Sources of Energy by Order dated 11.12.2009, this Commission has determined the tariff for the existing Plants which have completed ten years of the PPA period. The finding of this Commission reads thus :

“In view of the fact that, after completion of 10 years debt servicing will have been fully met and the only increase (marginal) would be in respect of O&M expenses, but at the same time the opportunity cost of the power has gone up, the Commission decides to allow the rate equal to the rate at the end of the tenth year, without escalation for the next ten years for all renewable projects. This tariff is also applicable to such PPAs in which ten years period is already completed but no tariff has been determined.”

- (c) On consideration of the said Order dated 11.12.2009, this Commission has taken the view that in the case of the Wind and Mini Hydel Projects, which have entered into PPAs upto 31.12.2009 and which have completed ten years period from the COD, the tenth year tariff will be applicable for the next ten years of the term of the PPA without any escalation.
- (d) In the present case, the ten years' period from the COD would be completed on 19.5.2015. Therefore, as noted above, the Petitioner should be allowed the tariff of ₹3.422 per unit, which was the tenth year tariff as per the PPA from the eleventh year onwards from the COD, i.e., from 20.5.2015.

(e) As already noted above, in the present case, the un-depreciated value of the Project Cost is ₹32.93 Crores after ten years from the COD. The Petitioner has failed to prove that it has sustained a loss of ₹130.72 Crores or any other amount and also to prove that any amount was required for renovation and modernization of the generating units. Therefore, the unabsorbed Capital Cost of the Project that could be assumed from the beginning of the eleventh year from the COD is ₹32.93 Crores. In that event, the impact on tariff for the next ten years of the term of the PPA would be less than one rupee per unit of energy. Therefore, fixation of tariff of ₹3.422 per unit from the eleventh year onwards from the COD is justifiable and the Petitioner has not made out a case for any higher tariff than this.

(f) For the above reasons, we hold that, the Petitioner shall be paid a tariff of ₹3.422 per unit, without any escalation, for the energy delivered from the eleventh year onwards from the COD, for the remaining term of the PPA. We answer Issue No(5), accordingly.

10) **ISSUE No.(6)** : *What Order?*

For the foregoing reasons, we pass the following Order:

ORDER

- (a) The Petitioner is not entitled to a tariff of ₹4.16 (Rupees Four Point One Six) per unit for the energy supplied from the eleventh year onwards from the Commercial Operation Date, as prayed for in the Petition; and
- (b) The Petitioner shall be paid a tariff of ₹3.422 (Rupees Three Point Four Two Two) per unit, without any escalation, for the energy delivered from the eleventh year onwards from the Commercial Operation Date, for the remaining term of the Power Purchase Agreement dated 3.2.2004.

Sd/-
(M.K. SHANKARALINGE GOWDA)
CHAIRMAN

Sd/-
(H.D. ARUN KUMAR)
MEMBER

Sd/-
(D.B. MANIVAL RAJU)
MEMBER