

No.: N/38/15

---

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

**Dated : 24<sup>th</sup> November, 2016**

**Present:**

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

**OP No. 19 / 2015**

**BETWEEN:**

Maris Power Supply Company Private Limited,  
No.11, Cathedral Road,  
Chennai – 600 086.

..

**PETITIONER**

*[Represented by Shri Balakrishna Shastry, G, Advocate]*

**AND:**

Bangalore Electricity Supply Company Limited,  
K.R. Circle,  
Bengaluru-560001

..

**RESPONDENT**

*[Represented by Just Law, Advocates]*

-----

**ORDERS**

1) The Petitioner in the present Petition has prayed for the determination of tariff at the rate of ₹4.50 per unit for the energy supplied from the eleventh year of the Power Purchase Agreement (PPA) dated 17.3.2005, executed between it and the Respondent.

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

(a) The Petitioner – originally known as 'M/s. Maris Power Supply Company Limited' incorporated under the Companies Act, 1956, on its conversion to a Private Limited Company got a fresh Certificate of Incorporation dated 2.1.2012, consequent upon the change of its name as 'Maris Power Supply Company Private Limited'.

(b) In March, 2004, the Government of Karnataka accorded its approval to the Petitioner for establishment of a 5.25 MW capacity Wind Power Project at Gonur, Chitradurga District and directed to execute a PPA with the Karnataka Power Transmission Corporation Limited (KPTCL). Accordingly, the PPA was executed between the KPTCL and the Petitioner on 17.3.2005 (ANNEXURE-B). This PPA was assigned to the Respondent – Bangalore Electricity Supply Company Limited (BESCOM) upon unbundling of the functions of the KPTCL. The Wind Power Project of the Petitioner achieved Commercial Operation on 10.6.2005.

(c) The tariff agreed under the PPA was at the rate of ₹3.10 per unit (Base Tariff) for the energy delivered to the State 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 ₹0.062 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 ₹3.658 per unit.

(d) Further, it was agreed under the PPA that, from the eleventh year onwards from the COD, for the energy delivered the Petitioner shall be paid at a rate based on operating costs and incentives to be agreed upon by mutual negotiations, and in case the parties do not arrive at a mutual agreement on the tariff, the same should be referred to the Commission for determination of the tariff.

(e) The Petitioner has filed the present Petition on 15.6.2015, as there was no consensus between the parties on the tariff payable for the eleventh year onwards from the COD.

(f) The Petitioner has urged the following grounds for claiming the tariff at ₹4.50 per unit from the eleventh year onwards of the PPA :

(i) That a sum of ₹20,30,00,000/- was invested for establishing a Wind Power Project. As per the norms, the following amounts should have been realized from the sale of energy each year during the first ten year period from the COD :

Depreciation at 7% (per year)	..	₹ 1,27,89,000.00
Loan (considered at 70% of Capital Cost of ₹ 20,30,000/- at 13% interest (on ₹ 14,21,00,000/-)(per year)	..	₹ 1,84,73,000.00
Equity at 30% on ₹ 2,01,30,000 (per year) at 15.5%.	..	₹ 94,39,500.00
O&M Cost at average 1.5% (per year)	..	₹ 30,60,000.00
<b>TOTAL</b>	..	<b>₹ 4,37,61,500.00</b>

Therefore, for ten years a sum of ₹43,76,15,000 should have been realized.

Whereas, the Petitioner has realized ₹33,05,34,661 only (in the Petition, the Petitioner has shown it as ₹33,10,534,661, which is obviously a wrong figure). Thus, the recovery of return on investment is short by ₹10,70,80,339. The Petitioner claims that this short recovery of return on investment has a tariff impact of ₹1.94 per unit (at 22 PLF), as per the Calculation Sheet produced at ANNEXURE-H to the Petition;

(ii) Renovation and Upgradation of Wind Energy Generators :

That a Project Report has been got prepared by requisitioning the services of an Expert Engineer and Chartered Accountant. As per the said Report, a complete overhaul of each of the Wind Energy Generators (WEGs) is envisaged with refurbishment/replacement of the components, as detailed in the Report, which is essential to achieve the rated performance with rated efficiency under the present PLF conditions. Further, it enhances the life of the operating equipment and ensures trouble-free operations for the next ten years. The total estimated cost for refurbishment/ replacement of the components comes to ₹9,56,00,000. This has the impact on the tariff at ₹1.48 per unit;

(iii) The unabsorbed cost of original investment is to the extent of ₹6,89,50,000. This has the tariff impact of ₹1.29 per unit.

(g) That the total tariff, from the above heads, comes to ₹4.70 per unit. This Commission, in its Order dated 24.2.2015, has fixed a tariff of ₹4.50 per unit for

the energy purchased from the Wind Power Plants. Therefore, the Petitioner has restricted its claim for tariff at ₹4.50 per unit from the eleventh year onwards of the PPA. 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) The Respondent has admitted that, the Petitioner has executed the PPA dated 17.3.2005 in respect of the Wind Power Project which achieved Commercial Operation on 10.6.2005.

(b) The Respondent has denied the claim of the Petitioner for a tariff of ₹4.50 per unit from the eleventh year onwards from the COD. The Respondent has contended that, the tariff for the tenth year from the COD would work out to ₹3.658 per unit as per the PPA and that as per the generic Tariff Order dated 11.12.2009 relating to the NCE Projects, the Petitioner was entitled to the said tenth year tariff of ₹3.658 per unit without escalation, for the remaining ten years term of the PPA.

(c) Article 5.2 of the PPA clearly sets out the methodology to be adopted for deriving the tariff to be paid from the eleventh year onwards and such being the case, the Petitioner cannot go beyond the said terms agreed in Article 5.2 of the PPA. The Respondent has relied upon the decision in Civil Appeal

No.5612/2012 in the case of *Konark Power Project Limited –Vs- BESCO and another*, in support of its contention.

- (d) That the tariff agreed in the PPA was a generic tariff determined by the Competent Authority, on the assumptions made with regard to the investments to be made on such Projects, as well as the working of the Plant, PLF, servicing of debt, etc. The generic tariff is binding on the Generator who enters into a PPA with the Distribution Licensee. Such Generator cannot later contend that, he is entitled to re-fixation of tariff based on the actual investments made. This Commission has already passed orders considering Article 5.2 of the PPA dealing with the tariff to be paid from the eleventh year onwards and has held that, from the eleventh year onwards, the last paid tenth year tariff would be applicable, without any escalation, for the further term of the PPA. Therefore, the Petitioner cannot claim re-determination of the eleventh year tariff.
- (e) The Respondent has denied the averments made in the Petition, that ₹10,70,80,339 was the short recovery of return on investment and that a sum of ₹9,56,00,000 was required for refurbishment/replacement of WEGs and transmission system and other civil works, and that ₹6,89,50,000 was the amount towards unabsorbed cost of original investment at the end of the tenth year of the PPA.
- (f) The Respondent has denied that, the Petitioner has invested a sum of ₹20,30,00,000 for establishing the Wind Power Project. The Respondent has

contended that, the two invoices produced by the Petitioner at ANNEXURES - F and G are illegible, and also that the Petitioner has not substantiated the investment made by it for the establishment of the Wind Power Project.

(g) The Respondent has denied the correctness of the Project Report on 'Renovation and Modernization of the Wind Project' produced at ANNEXURE-J to the Petition. The Respondent has contended that the Project does not require any renovation and modernization, and the Project Report has been created for the purpose of making a false claim and that the claim of ₹2,00,00,000 for the civil works and ₹1,00,00,000 for upgradation of the transmission system, cannot be treated as part of the renovation and modernization of the Project.

(h) The Respondent has contended that, the claim towards the unabsorbed cost of original investment has no basis and the same is untenable, because the Petitioner has already realized the original investment made by it. Therefore, the Respondent has prayed for dismissal of the Petition.

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

(1) Whether the Petitioner proves that, it had invested a sum of ₹20,30,00,000 for establishing its Wind Power Project?

- (2) Whether the Petitioner proves that, a sum of ₹43,76,15,000 should have been realized during the first ten years from the COD?
  - (3) Whether the Petitioner proves that, the unabsorbed cost of the Wind Power Project is ₹689.50 Lakhs at the beginning of the eleventh year from the COD?
  - (4) Whether the Petitioner proves that, the Wind Power Project requires renovation / refurbishment and if so, whether the cost for the same would come to ₹956 Lakhs?
  - (5) What should be the tariff payable to the Petitioner from the eleventh year from the COD, for the remaining term of the PPA dated 17.3.2005?
  - (6) What Order?
- 5) After considering the submissions of the parties and the material placed on record, our findings on the above issues are as follows :
- 6) **ISSUE No.(1)** : *Whether the Petitioner proves that, it had invested a sum of ₹20,30,00,000 for establishing its Wind Power Project?*

The Petitioner has produced copies of two invoices for proving that a sum of ₹20,30,00,000 has been spent by it for establishing the Wind Power Project. The Respondent has denied the amount invested by the Petitioner and stated that, the copies of the invoices are illegible. It is seen that, the invoices produced by the Petitioner at ANNEXURES – F and G to the Petition are not illegible, as claimed by the Respondent. However, there is no material to show that these invoices are acted upon by the Petitioner or they relate to the



Wind Energy Generators established at the Wind Power Project site. When the Respondent has denied the quantum of investment stated by the Petitioner for establishing the Wind Power Project, the Petitioner should have produced the evidence for having paid the amounts mentioned in the invoices to the person who supplied the Wind Energy Generators and who erected and commissioned the same. In the absence of such evidence, it is to be held that, the Petitioner has not proved that, it has invested ₹20,30,00,000 for establishing the Wind Power Project. Mere production of invoices does not establish that, the supply and erection of WEGs had taken place as shown in the invoices, unless there is some further proof to believe the same. Therefore, we answer Issue No.(1) in the negative.

7) **ISSUE No.(2):** *Whether the Petitioner proves that, a sum of ₹43,76,15,000 should have been realized during the first ten years from the COD?*

(a) In paragraph-9 of the Petition, the Petitioner has given the particulars of the amount of ₹43,76,15,000, which it should have realized during the first ten years from the COD. The said particulars are extracted below:

Depreciation at 7% (per year)	..	₹1,27,89,000.00
Loan (considered at 70% of on capital cost of ₹20,30,00,000/- at 13% interest (on ₹14,21,00,000/- (per year)	..	₹1,84,73,000.00
Equity at 30% on ₹201300000 (per year) at 15.5%	..	₹ 94,39,500.00
O&M cost at average of 1.5% every year (per year)..	..	₹ 30,60,000.00
		-----
<b>Total</b>	<b>..</b>	<b>₹4,37,61,500.00</b>

Therefore, according to the Petitioner, the amount which should have been realized for ten years works out to ₹ 43,76,15,000/-.

(b) The Petitioner itself has stated in paragraph-11 of the Petition that, while fixing the tariff for this Project the parameters like, interest, depreciation, RoE, incentives, O&M and PLF, were not considered. Admittedly, the tariff for this Project has been fixed by the Government of Karnataka, based on the Guidelines issued by the Ministry of Non-Conventional Energy Sources (MNES) for fixing the tariff for the NCE Projects. It is verified by this Commission that, a PPA was earlier executed between the parties on 14.5.2004, which was termed as 'initialled PPA' and the same was approved by this Commission. Thereafter, the approved 'initialled PPA' was revised, duly incorporating the changes as agreed to between the parties, and the present PPA dated 17.3.2005 (ANNEXURE-B) has been executed. Therefore, the PPA (ANNEXURE-B) is deemed to have been executed on 14.5.2004 and the tariff applicable for that period was allowed.

(c) When the parameters like, the Project cost, interest, depreciation, etc., were not considered at the time of fixing the tariff, it is not known on which principle the Petitioner has relied upon the parameters like, depreciation, interest on loan, interest on equity and O&M cost, for arriving at the sum shown in paragraph-9 of the Petition. Therefore, the claim of the Petitioner that, it

- should have received a sum of ₹43,76,15,000, is not substantiated and therefore, the same cannot be accepted.
- (d) The Petitioner has contended in the Petition that, the PLF should have been 26%, whereas the actual PLF achieved was only 22%, thereby it has not realized the entire amount from the tariff. The Petitioner has stated that, it has realized a sum of ₹33,05,34,661 by sale of energy to the Respondent for the first ten years of the PPA. This fact has not been disputed by the Respondent. According to the Petitioner, had it achieved 26% PLF instead of 22% PLF, it would have received the entire amount. If that is so, the amount which should have been realized by the Petitioner would be only ₹39,06,31,872. Therefore, the recovery of the cost of investment would be, at best, short by ₹6 Crores and not ₹10.70 Crores, as claimed by the Petitioner.
- (e) Different generic tariffs were allowed for different NCE Projects on the basis of the MNES Tariff Guidelines. The capital cost of the Project and the PLF were the material components while determining the generic tariff. In a particular case, if a tariff revision is claimed on the ground that, the assumed PLF has not been achieved, it is essential to establish that, the actual capital cost incurred on the Project is not less than the assumed capital cost. In the present case, the Petitioner can take advantage of the short-fall in the PLF, only after establishing that, it had actually invested the capital cost and that it had actually incurred the recurring expenses for running the Project, assumed in the generic Tariff Order. In other words, the generator claiming a Project-

specific tariff, should place and prove all essential facts that are necessary to determine the tariff on Cost-Plus principle. The Petitioner has not produced the MNES Tariff Guidelines for the NCE Projects, for ascertaining the capital cost assumed or the PLF assumed in the case of Wind Power Projects. Further, the Petitioner has not produced any acceptable evidence to establish the actual cost incurred for establishing the Wind Power Project and the actual recurring cost for running the same. For the above reasons, we answer Issue No.(2) in the negative.

- 8) **ISSUE No.(3):** *Whether the Petitioner proves that, the unabsorbed cost of the Wind Power Project is ₹689.50 Lakhs at the beginning of the eleventh year from the COD?*

The unabsorbed cost calculated by the Petitioner at ₹689.50 Lakhs is not based on any approved principle, but only on the assumptions of the Petitioner. The Petitioner has not given any particulars or reasons for calculating the unabsorbed cost of the original investment amount, except stating that the unabsorbed cost of the original investment has an impact on the tariff at ₹1.29 per unit. The Petitioner has produced the Calculation Sheet, marked as Exhibit-III, along with ANNEXURE-K to the Petition to show the calculations of the unabsorbed cost. The calculation is based only on certain assumptions, not on any acceptable norms. Therefore, we answer Issue No.(3) in the negative.

- 9) **ISSUE No.(4):** *Whether the Petitioner proves that, the Wind Power Project requires renovation / refurbishment and if so, whether the cost for the same would come to ₹956 Lakhs?*

The Project Report dated 15.5.2015, produced by the Petitioner, states that, a complete overhaul of each of the WEGs is envisaged and refurbishment / replacement of the components in each 750 KW WEG unit is required as detailed, therein. Further, it is stated that, this is essential in order to achieve the rated performance and efficiency under the present PLF conditions. There is no evidence on record to show, what was the rated performance and efficiency of the WEGs supplied by the manufacturer. The Project Report also does not show, what was the shortfall to the rated performance and efficiency of each of the WEGs. In this regard, the Respondent has denied the averment made in the Petition that, overhaul/renovation was required to the WEGs. It is contended by the Respondent that, the life of a Wind Power Plant would be 25 years and considering the said life of the Plant, the WEGs would not require overhauling/refurbishment during this tenure of the Plant. Therefore, the Respondent has contended that, the Project Report on 'Renovation and Modernization of Wind Power Generators' is a document got prepared by the Petitioner for making a false and untenable claim. The life of a Wind Power Project is considered as 25 years in the generic Tariff Orders passed by this Commission. There is no provision in the PPA for Wind Power Projects for renovation/modernization of the Project within its lifetime. Hence, the presumption is that, a Wind Power Project would survive for its entire life,

without there being any scope for renovation/modernization. Therefore, we answer Issue No(4) in the negative.

10) **ISSUE No.(5):** *What should be the tariff payable to the Petitioner from the eleventh year from the COD, for the remaining term of the PPA dated 17.3.2005?*

(a) The relevant portion of Article 5.2 of the PPA states that, from the eleventh year onwards from the COD, the Respondent shall pay to the Petitioner for the energy delivered at the Metering Point at a rate based on the operating cost and incentives to be agreed upon by mutual negotiations. Further, that in case, the parties do not arrive at a mutual agreement on the tariff, the same shall be determined by this 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, it is clear, 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 9.6.2015. Therefore, as noted above, the Petitioner should be allowed the tariff of ₹3.658 per unit, which was the tenth year tariff as per the PPA from the eleventh year onwards from the COD, i.e., from 10.6.2015.
- (e) As already noted above, in the present case, even if it is assumed that the actual PLF achieved by the Wind Power Project was lower by 4 percentage points than the assumed PLF of 26%, the short-recovery of the Capital Cost would be about ₹6 Crores. In our estimation, the unabsorbed cost of the Wind Power Project at the beginning of the eleventh year from the COD, could not exceed more than ₹4 Crores. Therefore, the Capital Cost of the Wind Power Project that could be assumed at the beginning of the eleventh year from the COD would be about ₹10 Crores. In that event, the impact on tariff for the next ten years of the term of the PPA, would be less than ₹2.00 per unit. Therefore, payment of ₹3.658 per unit from the eleventh year onwards from the COD, is quite 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 ₹3.658 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.

11) **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 ₹4.50 (Rupees Four Point Five Zero) 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 ₹3.658 (Rupees Three Point Six Five Eight) 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 17.3.2005.

Sd/-

(M.K. SHANKARALINGE GOWDA)  
CHAIRMAN

Sd/-

(H.D. ARUN KUMAR)  
MEMBER

Sd/-

(D.B. MANIVAL RAJU)  
MEMBER