

**KERALA STATE ELECTRICITY REGULATORY COMMISSION**  
**THIRUVANANTHAPURAM**

**Present : Adv. A.J Wilson, Member (Law)**

**OP No 29/2022**

In the matter of : Petition filed by M/s KSEB Ltd., seeking redetermination of tariff of Ahalia Wind Energy Pvt Ltd.

Petitioner : Kerala State Electricity Board Ltd  
KSEB Ltd represented by : Shri. Edward.P.Boniface, AEE, TRAC, KSEB Ltd.  
Shri. Shine Raj, AE, KSEB Ltd

Respondent : Ahalia Alternate Energy Pvt Ltd, Palakkad  
Respondent represented by : Dr.K.K.Sasi, Project Director, Ahalia  
Shri. Yadhu Krishnan, Ahalia

Date of first hearing : 01.06.2022  
Date of second hearing : 23.08.2022, 11.00 AM (e-hearing through Video Conferencing)

**Order dated 10.10.2022**

1. M/s Kerala State Electricity Board Ltd (hereinafter referred to as M/s KSEB Ltd or the petitioner) filed a petition before the Commission on 16.05.2022 with the prayers to:

*“redetermine the tariff for the electricity generated from the 8.4 MW, wind energy of M/s. Ahalia Alternate Energy Pvt Ltd. considering the facts and other details as submitted in the instant petition and the provisions in the KSERC (Renewable Energy) Regulation, 2015 and the direction of the Hon’ble Commission vide order dated 22.02.2017 on Petition No. 10/2016.”*

2. The summary of the petition filed by M/s KSEB Ltd is given below.

- (1) The Commission, vide the Order dated 22-02-2017 in petition OP No.10/2016, ordered the following:

- (i) *“The generic tariff applicable to 8.4 MW wind power project developed by M/s Ahalia Alternate Energy Pvt. Ltd, Palakkad under IPP mode is Rs 5.34 per unit, duly considering the benefit of accelerated depreciation. This tariff is applicable for the entire energy purchased by KSEB Ltd from the date of commercial operation of the first unit on 22-02-2016 till the term of the PPA.*

- (ii) *M/s AAEPL shall claim CDM benefits and share the same with K S E B Ltd. as directed in para 26 of this order.*
  - (iii) *The draft power Purchase Agreement duly initialed by both the petitioner M/s AAEPL and the respondent KSEB Ltd is hereby approved with modification to the extent as directed in order (i) and (ii) above. Item No (i) may be incorporated into the agreement by modifying clause 6.9 of draft agreement suitably. M/s AAEPL & K S E B Ltd. are directed to make suitable modifications in the draft PPA before they enter into PPA.*
  - (iv) *The agreement shall remain valid for a period of 13 years from 23-03- 2016, i.e., from the date of commissioning of the three units out of four units installed by M/s AAEPL.*
  - (v) *A copy of the PPA, duly signed and entered in to between the parties shall be submitted to the Commission for records.*
  - (vi) *In clause 6.9 of draft PPA, the word 'order dated 11/11/2015 of KSERC' may be substituted by the words 'Kerala State Electricity Regulatory Commission (Renewable Energy) Regulation, 2015 issued on 11.11.2015'.*
- (2) The Commission while approving a generic tariff of Rs 5.34 per unit had considered the CUF of the project at 22% applicable to the wind zone – 2, in accordance with the Order of CERC dated 31.03.2015 in petition No SM/004/2015(Suo Motu) and this tariff was ordered to be applicable for the entire energy purchased from the date of commercial operation of the 1st unit till the term of the PPA.
- (3) It is also submitted that KSEB Ltd on further negotiation with the generator has reduced the tariff by 2 % to Rs.5.23/unit. KSEB Ltd has been purchasing power at the same tariff for a period of 13 years from CoD i.e., 23.03.2016 as per the terms and conditions laid out in the PPA.
- (4) Regulation 21(6) of the KSERC (Renewable Energy) Regulations, 2015 is extracted as below:  
*"The Commission may, on application from the generator or the purchaser of electricity from a renewable energy project, revise the generic tariff applicable to the said project and issue appropriate orders, in case, -*  
 .....  
*(b) the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of a wind energy project varies due to site specific reasons, in such a way that the actual average capacity utilization factor conforms to that of a different wind zone."*
- (5) It is further submitted that the Commission under paragraph 28 of the order states as follows.  
*"The generator or the power purchaser can approach the Commission for revising the generic tariff determined as above, if the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of the wind power projects of M/s AAEPL varies due to site*

*specific reasons, in such a way that the actual average capacity utilisation factor conforms to that of a different wind zone, invoking the sub regulation (6) to Regulation 21 of the KSERC (Renewable Energy) Regulations, 2015.”*

- (6) KSEB Ltd has further submitted that the generation details of the plant for the last three years were analyzed and was observed that the actual CUF of the plant is in the range of 25% to 28%. The details are as given below:

Period	Total units Purchased	CUF %
2017-18	20981231.22	28.51
2018-19	18132451.2	24.64
2019-20	19225560	26.13
2020-21	18513480	25.16

- (7) *The Project and site-specific reasons submitted by KSEB Ltd necessitating redetermination of tariff are as follows:*

- a) *As per the request of KSEB Ltd, the National Institute of Wind Energy (NIWE) Chennai had conducted study on wind potential at Kanjikode, prepared a report and submitted on 16.02. 2016. As per the report, the mean wind power density at 80 meter is 278 W/m<sup>2</sup> and 50 meter is 175 W/m<sup>2</sup>, comparing the wind profiles, 80-meter level has high wind power density than 50 meters.*
- b) *As per the CERC order dated 31.03.2015 in petition No SM/004/2015(Suo Motu), the wind density of 278W/m<sup>2</sup> is classified under Wind Zone-3 with CUF 25%.*

- (8) Considering the above, KSEB Ltd has requested for redetermination of tariff as per the provisions in the KSERC (Renewable Energy) Regulation, 2015.

3. The Commission admitted the petition as OP 29/2022 and the first hearing on the petition was held on 01.06.2022 through video conference. Smt. Latha.S.V. AEE, presented the petition on behalf of KSEB Ltd. Dr.K.K Sasi, Project Director presented the counter argument on behalf of the Respondent M/s Ahalia Alternate Energy Pvt. Ltd (M/s AAEPL).

4. During the hearing KSEB Ltd submitted the following;

- 1) The Commission vide Order dated 22.02.2017 in petition OP No:10/2016 had approved ₹5.34/unit as tariff for the electricity generated from 8.4 MW wind plant developed by M/s AAEPL duly considering the benefit of accelerated depreciation. However, through negotiation, the tariff of the power generated from the project was reduced to 5.23/unit and KSEB Ltd has been procuring power from the project at this rate.
- 2) KSEB Ltd further submitted that, the Commission while approving the generic tariff at the rate of ₹5.34/unit adopted the normative CUF of 22%.

However, the actual CUF achieved from the CoD during the last 3 years is as given below;

Year	CUF (in percentage)
2017-18	28.51
2018-19	24.64
2019-20	26.13
2020-21	25.16

- 3) The paragraph 28 of the Order dated 22.02.2017 in petition OP No:10/2016 specify that, **“the generator or procurer can approach the Commission for revising the generic tariff determined, if the actual average CUF for 3 consecutive years immediately following the date of CoD of the wind project of M/s AAEPL varies due to site specific reasons”**
- 4) KSEB Ltd further submitted that the Regulation 21(6)(a),(b) of the KSERC (Renewable Energy) Regulation, 2015 also provides the following;
- “21(6) The Commission may, on application from the generator or the purchaser of electricity from a renewable energy project, revise the generic tariff applicable to the said project and issue appropriate orders, in case, -*
- (a) The actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of the projects other than wind energy projects varies due to site specific reasons, by more than ten percent of the normative capacity utilization factor adopted earlier for the determination of the generic tariff applicable to that project; and*
- (b)The actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of a wind energy project varies due to site specific reasons, in such a way that the actual average capacity utilization factor conforms to that of a different wind zone.”*
- 5) Since, the actual CUF of the wind project of the M/s AAEPL varies between 25 to 28% against the normative CUF of 22% adopted for generic tariff determination, KSEB Ltd had requested to re-determine the generic tariff for the wind energy project of M/s AAEPL with the CUF @25% (wind zone-3).

5. During the hearing M/s AAEPL submitted the following;

- (i) KSEB Ltd is currently purchasing power from the wind plant of M/s AAEPL at the negotiated tariff of ₹5.23/unit with benefit of accelerated depreciation, however, the respondent has not availed the benefit of the accelerated depreciation (AD).

- (ii) The respondent M/s AAEPL also confirmed that the CUF of the project was above 25% due to the high wind power density. However, there is a chance to reduce the CUF of the project in the coming years. Hence the Respondent M/s AAEPL is in a great risk considering the fact that the redetermination of tariff will be allowed only once during the entire project life.
  - (iii) AAEPL further submitted that, at present they are getting RoI @5.55% only, which is expected to fall to 0.5% within the next 10years.
6. Based on the deliberations during the first hearing held on 01.06.2022, the Commission directed the petitioner and respondent to submit the additional details within three weeks from the date of the hearing on 01.06.2022.
7. In compliance to the direction of the Commission, M/s AAEPL on 29.06.2022 has submitted the following;
- (i) M/s AAEPL had availed a loan of ₹ 31.92 Crores and contributed ₹22.31 Crores for implementing the project. The AMC with M/s Suzlon is ₹22 Lakh with 5% annual escalation for a period of 10 years.
  - (ii) M/s AAEPL has also submitted that, they had received Generation Based Incentive (GBI) at the rate of ₹0.50/unit. Even with the GBI @Rs 0.50/unit, the RoI of the project is 5.50% only.
  - (iii) The actual CUF of the Ahalia Wind Machines is 25.3% as against normative CUF of 22%, i.e., there is only a negligible crossover to wind zone III from the wind zone II.
  - (iv) The Respondent M/s AAEPL has requested before the Commission that the present crossover to the higher wind zone may be ignored.
  - (v) M/s AAEPL further submitted that they had not claimed the accelerated depreciation (AD) right from the beginning. Hence, M/s AAEPL requested before the Commission to award the deserving generic tariff of ₹5.98/unit applicable for wind projects in wind zone II.
8. M/s KSEB Ltd vide the additional submission dated 04.07.2022 submitted the following.
- (i) M/s AAEPL has availed a grant of Rs 5.29 crores for the project.
  - (ii) KSEB Ltd has requested to fix the tariff at the lower of the project specific tariff or the generic tariff notified by the Commission in KSERC (Renewable Energy) Regulations, 2015 for wind zone-3 for the year 2015-16 after deducting the grant received and the accelerated depreciation benefit of the project.

9. The Commission held the second hearing on the petition through video conference on 23.08.2022. Sri. Shine Raj represented M/s KSEB Ltd and presented the petition on behalf of the petitioner. Dr.K.K.Sasi, Project Director, presented the comments on behalf of the Respondent M/s AAEPL. Summary of the deliberations during the hearing is given below.

(1) At the outset of the hearing the Commission clarified that the deliberations of the hearing are limited to the issue related to the CUF of the project.

(2) During the hearing, the petitioner M/s KSEB Ltd submitted the following;

(i) As per the Order of the Commission dated 22.02.2017 in OP No: 10/2016, the generic tariff applicable to 8.4 MW wind power project developed by M/s Ahalia Alternate Energy Pvt. Ltd, Palakkad under IPP mode is Rs 5.34 per unit, duly considering the benefit of accelerated depreciation.

This tariff is applicable for the entire energy purchased by KSEB Ltd from the date of commercial operation of the first unit on 22-02-2016 till the term of the PPA. The Commission while approving the tariff had considered the CUF of the project as 22% under wind zone-2. After the Order of the Commission M/s KSEB Ltd conducted the negotiations with M/s AAEPL and finally the generator reduced the tariff to ₹5.23/ unit.

(ii) The Commission in the Order dated 22.02.2017 specified that, the generator or the power purchaser can approach the Commission for revising the generic tariff determined as above, if the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of the wind power projects of M/s AAEPL varies due to site specific reasons.

(iii) In para 17 of the Order of the Commission dated 22.02.2017, it is noted that the generic tariff approved by the Commission for the year 2015-16, without considering the effect of financial assistance on the tariff for renewable energy is Rs 6.58/unit, Rs 5.98/unit and Rs 5.27/unit respectively for the wind zone-1, wind zone-2 and wind zone-3. As per the Regulation-24 of the KSERC Renewable Energy Regulation, 2015, the Commission shall make appropriate adjustments considering the financial assistance such as capital subsidy or accelerated depreciation or concessions in duties and taxes, if any availed by the project developer for the implementation of such project, keeping in view of the guidelines and methods specified by Central Commission.

(iv) In para 21 of the Order of the Commission dated 22.02.2017, it is further noted that M/s AAEPL is eligible to claim accelerated

depreciation and other benefits as above. The end consumers are entitled to get renewable energy at lower costs possible, after considering accelerated depreciation and other benefits. M/s AAEPL cannot claim higher cost on the basis that, they have not availed the accelerated depreciation or not intending to avail such benefits.

- (v) M/s KSEB Ltd submitted that in para 21 of the Order of the Commission dated 22.02.2017, it is noted that M/s AAEPL shall claim CDM benefits and share the same with M/s KSEB Ltd.
- (vi) M/s KSEB Ltd further submitted that as per the request of M/s KSEB Ltd, M/s AAEPL submitted the documents, but without documentary evidence for verifying its correctness.
- (vii) M/s KSEB Ltd requested to determine the levelized tariff with the benefit of accelerated depreciation with the details submitted by M/s AAEPL, which is given below;

Total Capacity – 8.4 MW  
Project cost Including installation, testing and Commissioning – Rs. 56 crores.  
Total Grant availed – Rs. 5.29 Cr.  
Loan amount – Rs. 35 Cr.  
Loan interest – 9.77%

- (3) M/s AAEPL submitted the following;
  - (i) While considering the tariff at ₹5.23/unit the payback period will last for 10 years. On further reducing the tariff, the project may not become viable.
  - (ii) M/s AAEPL submitted that they are not availing the benefit of accelerated depreciation.
  - (iii) M/s AAEPL further submitted that, on monitoring the CUF of M/s INOX and other wind generators in 2016-17, it is noted that the CUF is higher due to the high wind power density in that area. The main concern put forward by M/s AAEPL is that during the coming years there is no guarantee that this will persist.
  - (iv) M/s AAEPL submitted that if tariff redetermination is done after considering this negligible cross over to wind zone 3, it will in turn affect the project adversely.

### **Analysis and Decision**

- 10. The Commission has examined in detail the petition filed by M/s KSEB Ltd, counter affidavit of the respondent M/s AAEPL, deliberations of the subject

matter during the hearings held on 01.06.2022 and 23.08.2022, as per the provisions of the Electricity Act, 2003, various Regulations and Orders issued by the Central Commission and KSERC, hereby decided the following regarding the subject petition.

11. KSEB Ltd, had filed the present petition dated 11.05.2022 for revising the generic tariff for the electricity generated from the 8.4 MW Wind Power Plant established by M/s. Ahalia Alternate Energy Pvt Ltd.
12. The Commission has examined the prayer of the KSEB Ltd in detail and noted the following.

- (1) Based on the petition filed by the respondent M/s AAEPL and duly considering the comments and suggestions of the respondent KSEB Ltd, and also as per the provisions of the Electricity Act, 2003 and KSERC (Renewable Energy) Regulations, 2015, the Commission, vide the Order dated 22-02-2017 in petition OP No.10/2016 had approved the tariff for the electricity generated from the 8.4MW Wind Power Project of AAEPL @Rs 5.34/unit. The relevant portion relevant portions of the order are extracted below.

*“31. After carefully considering the facts and submissions, the Commission hereby orders as under;*

- (i) The generic tariff applicable to 8.4 MW wind power project developed by M/s Ahalia Alternate Energy Pvt. Ltd, Palakkad under IPP mode is Rs 5.34 per unit, duly considering the benefit of accelerated depreciation. This tariff is applicable for the entire energy purchased by KSEB Ltd from the date of commercial operation of the first unit on 22-02-2016 till the term of the PPA.*
- (ii) M/s AAEPL shall claim CDM benefits and share the same with K S E B Ltd. as directed in para 26 of this order.*
- (iii) The draft power Purchase Agreement duly initialed by both the petitioner M/s AAEPL and the respondent KSEB Ltd is hereby approved with modification to the extent as directed in order (i) and (ii) above. Item No (i) may be incorporated into the agreement by modifying clause 6.9 of draft agreement suitably. M/s AAEPL & K S E B Ltd. are directed to make suitable modifications in the draft PPA before they enter into PPA.*
- (iv) The agreement shall remain valid for a period of 13 years from 23-03-2016, i.e., from the date of commissioning of the three units out of four units installed by M/s AAEPL.*
- (v) A copy of the PPA, duly signed and entered in to between the parties shall be submitted to the Commission for records.*
- (vi) In clause 6.9 of draft PPA, the word ‘order dated 11/11/2015 of KSERC’ may be substituted by the words ‘Kerala State Electricity Regulatory Commission (Renewable Energy) Regulation, 2015 issued on 11.11.2015’.*

- (2) The Commission vide the paragraph 15 to 19 of the Order dated 22.02.2017 had specified that, it had adopted the generic tariff determined by the CERC for the year 2015-16 for approving the generic tariff of the 8.4MW Wind Power Project of M/s AAEPL. The relevant portion of the Order is extracted below.

*“15. The petitioner has not requested for determination of any project specific tariff as per the Regulation-22 of the KSERC (Renewable Energy) Regulation, 2015 for the wind project established by them. Hence, the Commission analysed the proposal on the basis of the generic tariff determined by the Commission as per the KSERC (Renewable Energy) Regulation, 2015 for the wind power project established by M/s AAEPL. As per the regulation 23 of the said regulation, the Commission has adopted the normative parameters, the generic tariff and the tariff period applicable to the renewable energy projects commissioned during the financial years 2014-15 and 2015-16, approved by the Hon’ble Central Electricity Regulatory Commission (CERC) as per order dated 31.03.2015 in Petition No SM/004/2015 (Suo Motu).*

*16. As per the details submitted by the petitioner, the wind power units of M/s AAEPL were commissioned during February and March-2016. Hence, as per the sub regulation (3) to Regulation -20 of KSERC (Renewable Energy) Regulation, 2015, the generic tariff determined for the year 2015-16 is applicable for the Wind power projects established by M/s AAEPL.*

*17. The generic tariff approved by the Commission for the year 2015-16, without considering the effect of financial assistance on the tariff for renewable energy is Rs 6.58/unit, Rs 5.98/unit and Rs 5.27/unit respectively for the wind zone-1, wind zone-2 and wind zone-3. As per the Regulation-24 of the KSERC Renewable Energy Regulation, 2015, as extracted under paragraph 14 above, the Commission shall make appropriate adjustments considering the financial assistance such as capital subsidy or accelerated depreciation or concessions in duties and taxes, if any availed by the project developer for the implementation of such project, keeping in view of the guidelines and methods specified by Central Commission.*

*The sub regulation (2) to Regulation (24) further specify that, the project developer shall submit to the Commission along with the application for approval or determination of tariff, all details relating to such financial assistance availed him.*

*However, the petitioner has not submitted the details of the financial assistance, such as capital subsidy or accelerated depreciation or concessions in duties and taxes etc availed by the project developer.*

*18. While determining the generic tariff for wind projects for the year 2015-16, Hon’ble CERC vide the order dated 31-03-2015 in petition No. SM/004/2015, had duly considered the subsidy/ incentive provided by the Central/ State Governments. The relevant portion of the order is extracted below.*

*63. Regulation 22 of the RE Tariff Regulations provides as under:*

*“The Commission shall take into consideration any incentive or subsidy offered by the Central or State Government, including accelerated depreciation benefit if availed by the generating company, for the renewable energy power plants while determining the tariff under these Regulations.*

*Provided that the following principles shall be considered for ascertaining income tax benefit on account of accelerated depreciation, if availed, for the purpose of tariff determination:*

*i) Assessment of benefit shall be based on normative capital cost, accelerated depreciation rate as per relevant provisions under Income Tax Act and corporate income tax rate.*

*ii) Capitalization of RE projects during second half of the fiscal year. Per unit benefit shall be derived on levelised basis at discount factor equivalent to Post Tax weighted average cost of capital”.*

*64. In terms of the above regulation, for the projects availing the benefit of accelerated depreciation as per applicable Income tax rate @ 33.99% (30% IT rate+ 10% surcharge +3% Education cess) has been considered. For the purpose of determining net depreciation benefits, depreciation @ 5.28% as per straight line method (Book depreciation as per Companies Act, 1956) has been compared with depreciation as per Income Tax rate i.e. 80% of the written down value method. Moreover, additional 20% depreciation in the initial year is proposed to be extended to new assets acquired by power generation companies vide amendment in the section 32, sub-section (1) clause (iia) of the Income Tax Act.*

*65. Depreciation for the first year has been calculated at the rate of 50% of accelerated depreciation 80% and 50% of additional depreciation 20% (as project is capitalized during the second half of the financial year as per proviso (ii) to Regulation 22. Income tax benefits of accelerated depreciation and additional depreciation, has been worked out as per normal tax rate on the net depreciation benefit. Per unit levelised accelerated depreciation benefit has been computed considering the post tax weighted average cost of capital as discount factor.*

*66. In the light of the discussion made in the preceding paragraphs, the generic tariffs of the following RE projects for the financial year 2015-16 have been determined as under:*

<i>Particulars</i>	<i>Total levelised Tariff</i>	<i>Benefit of accelerated depreciation if availed (Rs/kWh)</i>	<i>Net levelised tariff if benefit of accelerated depreciated if availed (Rs./kWh)</i>
<i>Wind zone 1 ( CUF 20%)</i>	<i>6.58</i>	<i>0.71</i>	<i>5.87</i>
<i>Wind zone 2 ( CUF 20%)</i>	<i>5.98</i>	<i>0.64</i>	<i>5.34</i>
<i>Wind zone 3 ( CUF 25%)</i>	<i>5.27</i>	<i>0.57</i>	<i>4.7</i>

.....  
 19. As detailed above, the Central Commission had approved the generic tariff for wind projects, after accounting the benefit of accelerated

*depreciation at Rs 5.87/unit, Rs 5.34/unit, and Rs 4.70 per unit respectively for wind zone-1, wind zone-2 and wind zone-3.”*

As extracted above, the generic tariff for wind power projects commissioned during the year 2015-16 in Wind zone-2 is Rs 5.98/unit without the benefit of accelerated depreciation and Rs 5.34/unit with the benefit of accelerated depreciation. Similarly, the generic tariff of wind power projects commissioned during the year 2015-16 in Wind zone-3 is Rs 5.27/unit without the benefit of accelerated depreciation and Rs 4.70/unit with the benefit of accelerated depreciation.

(3) The Commission vide the Order dated 22.02.2017 had approved the generic tariff of Rs 5.34/unit for the 8.4MW Wind Power Project of AAEPL, considering the certificate issued by the ANERT that, the WEG site of the AAEPL falls under Wind zone-2 of the State of Kerala.

13. However, the Commission vide the paragraph 28 of the Order dated 22.02.2017, specified that, the generator or the power purchaser can approach the Commission for revising the generic tariff determined in the Order dated 22.02.2017, if the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of the wind project of the AAPL varies due to site specific reasons. The relevant paragraph of the Order is extracted below.

“28. The generator or the power purchaser can approach the Commission for revising the generic tariff determined as above, if the actual average capacity utilisation factor for three consecutive years immediately following the date of commissioning of the wind power projects of M/s AAEPL varies due to site specific reasons, in such a way that the actual average capacity utilisation factor conforms to that of a different wind zone, invoking the sub regulation (6) to Regulation 21 of the KSERC (Renewable Energy) Regulations, 2015.”

14. The Regulation 21(6)(b) of the KSERC (Renewable Energy) Regulations, 2015 also provides for revision of the generic tariff of the wind projects in case the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of a wind energy projects varies due to site specific reasons. The relevant portion of the Regulations is extracted below.

*“22(6) The Commission may, on application from the generator or the purchaser of electricity from a renewable energy project, revise the generic tariff applicable to the said project and issue appropriate orders, in case,-*

.....

*(b)the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of a wind energy project varies due to site specific reasons, in such a way that the actual*

*average capacity utilization factor conforms to that of a different wind zone.*

15. As above, the Regulation 21(6)(b) of the KSERC (Renewable Energy) Regulations, 2015 and also the paragraph-28 of the Order dated 22.02.2017 provides for revising the generic tariff approved for the 8.4MW Wind Power Project of M/s AAEPL, if the actual average CUF for three consecutive years immediately following the date of commissioning of the wind projects varies due to the site-specific reasons in such a way that the actual average CUF conforms to that of a different wind zone.

***However, there is no provision in the KSERC (Renewable Energy) Regulations, 2015 and in the Order dated 22.02.2017 to revise the generic tariff of the Wind projects of the respondents M/s AAEPL based on the changes in the other norms and parameters except CUF.***

16. As discussed in the preceding paragraphs, the Commission vide the order dated 22.02.2017 had approved the tariff of the 8.4MW Wind Power Project of M/s AAEPL @ Rs 5.34/unit with the benefit of accelerated depreciation, which is the generic tariff approved for wind energy projects commissioned in the year 2015-16 at 'wind zone-II'.

The generic tariff of the wind energy projects was determined based on the various norms and parameters specified by the Central Commission as per the Order of the CERC dated 31.03.2015 in petition No. SM/004/2015. This Commission, as per the Regulation 23 read along with the Regulation 17 of the KSERC (Renewable Energy) Regulations, 2015 had adopted the norms and parameters and also the generic tariff determined by the CERC for the relevant years as applicable. Since the 8.4 MW of the AAEPL was declared CoD in the year 2015-16, and also duly considering the certification of the ANERT that the location of the wind power plant of the AAEPL falls under wind zone-II, this Commission has adopted the generic tariff applicable to wind power projects in wind zone-II for the year 2015-16, for the project of the AAEPL.

17. KSEB Ltd vide the petition dated 16.05.2022 submitted that the actual generation and CUF of the wind power project of the AAEPL as given below.

Period	Total units Purchased	CUF %
2017-18	20981231	28.51
2018-19	18132451	24.64
2019-20	19225560	26.13
2020-21	18513480	25.16
Average	19213181	26.11

As above, the actual average CUF of the 8.4MW wind power project of the AAEP L for the last four years from 2017-18 to 2020-21 is 26.11%. If the actual average CUF of the last three years from 2017-18 to 2019-20 is considered, the average CUF is 26.43%. The respondent M/s AAEP L has also not disputed the actual CUF of their 8.4 MW Wind Power Project at Kanjikode, Palakkad as claimed by KSEB Ltd.

18. As per the provisions of the Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012 and KSERC (Renewable Energy) Regulations, 2015, the classifications of wind zones based on the CUF is given below.

Wind Zones	CUF
Wind zone-1	20%
Wind zone-2	22%
Wind zone-3	25%
Wind zone-4	30%
Wind zone-5	32%

In the present case, the actual average CUF of the 8.4MW Wind Power Project of the M/s AAEP L since its CoD is 26.43%, which is more than 25% and below 30%, and hence the project falls under Wind Zone-III, instead of Wind Zone-II adopted in the original Order dated 22.02.2017.

19. As already discussed, as per the paragraph 28 of the original Order of the Commission dated 22.02.2017 and also as per the Regulation 21(6)(b) of the KSERC (Renewable Energy) Regulations, 2016, the Commission may revise the generic tariff if the actual average CUF of the wind projects during the last three consecutive years immediately following the date of CoD conforms to a different wind zone. In the present case, the Wind zone based on the actual average CUF conforms to Wind zone-III instead of Wind Zone-II. Hence the Commission has to revise the generic tariff of the 8.4MW Wind Power Project of M/s AAEP L as the generic tariff applicable to Wind Zone-III instead of Wind Zone-II, determined as per the Order of the Commission dated 22.02.2017 in petition OP No. 10/2016.
20. As already extracted under paragraph 12 of this Order, as per the Suo-motu Order of the CERC dated 31.03.2015 in petition No. SM/ 004/ 2015, the generic tariff determined for Wind Zone-III is Rs 5.27/unit without the benefit of accelerated depreciation is Rs 5.27/kWh and Rs 4.70/kWh with the benefit of accelerated depreciation.
21. The Commission in the Original Order dated 22.02.2017 in Petition OP No. 10/2016 had approved the generic tariff of the project with the benefit of accelerated depreciation. As already mentioned, the Commission in this Order has decided to consider the actual CUF instead of the normative CUF adopted

in the Original Order. As already mentioned, there is no provision in the KSERC (Renewable Energy) Regulations, 2015 and in the Order dated 22.02.2017 to revise the generic tariff of the Wind projects of the respondent M/s AAEPL based on the changes in the other norms and parameters except CUF, as requested by KSEB Ltd.

Further, as mentioned in the paragraph 20 of the Original Order, the petitioner has availed the generation-based incentive @Rs 0.50/unit available to the wind developers as per the Central Government notification No. 53/10/2011-WE dated 04.09.2013 for all wind power projects of the 12<sup>th</sup> plan period (2012-17). The respondent during hearing of this petition also clarified that, they had availed the GBI as provided by the Central Government. The tax holiday benefit also available to the petitioner. The respondent also claimed that, they were not availing the benefit of AAD. However, they are getting the benefit of GBI and tax holiday benefits.

However, the provisions of the KSERC (Renewable Energy) Regulations, 2015 and the paragraph 28 of the original order of the Commission dated 22.02.2017, does not permit to revise the generic tariff based on other considerations other than CUF. Hence the Commission constrained to limit the present revision of the generic tariff only for the change in CUF applicable to a different Wind Zone-III.

22. Considering all these reasons, the Commission decided to revise the tariff of the 8.4MW Wind Power Project of M/s AAEPL @ Rs 4.70/unit, i.e., the generic tariff applicable to wind power projects commissioned during the FY 2015-16, instead of Rs 5.34/unit, with the benefit of accelerated depreciation.
23. The Commission also examined the applicability of the revised tariff. The Regulation 21(6) of the KSERC (Renewable Energy) Regulations, 2015 is silent on the applicability of the revised tariff with retrospective or prospective effect. Further, Hon'ble APTEL and Hon'ble Supreme Court in its various judgment orders held that the prospective application of the Orders issued by the appropriate Commission. Considering these reasons, the Commission hereby orders that, the revised tariff shall be applicable from the date of this Order only.

#### **Order of the Commission**

24. The Commission, after examining the Petition filed by M/s KSEB Ltd dated 16.05.2022, the deliberations during the hearing held on 01.06.2022 and 23.08.2022, the provisions of the Electricity Act, 2003 and various Regulations and Orders issued by the CERC and KSERC and other relevant documents and records, hereby orders the following.
  - (1) Revise the generic tariff applicable to 8.4 MW wind power project developed by M/s Ahalia Alternate Energy Pvt. Ltd, Palakkad under IPP

mode @Rs4.70/unit instead of Rs 5.34/unit, with the benefit of accelerated depreciation.

- (2) The revised tariff shall be applicable from the date of this Order, and shall be valid for the remaining period of the PPA entered into between the KSEB Ltd and M/s AAEPL.

The petition is disposed of. Ordered accordingly.

**Sd/-**  
**Adv. A J Wilson**  
**Member (Law)**

Approved for issue

Sd/-  
C R Satheeshchandran  
Secretary