# KERALA STATE ELECTRICITY REGULATORY COMMISSION <u>THIRUVANANTHAPURAM</u>

Present: Sri. T.M.Manoharan, Chairman

Sri. K.Vikraman Nair, Member Sri. S. Venugopal, Member

# O.P. No.10/2016

In the matter of Approval of Power Purchase Agreement including tariff of 8.4 MW wind farm of M/s Ahalia Alternate Energy (P) Ltd at Palakkad.

Petitioner : Ahalia Alternate Energy Pvt Ltd, Palakkad

Petitioner represented by : Sri. Manoj Toms, CEO, AAEPL

Dr. K.K Sasi, Project Director, AAEPL

Vysakh Mohan, JE, AAEPL

Respondent : Kerala State Electricity Board Ltd,

Vydhyuthi Bhavanam, Pattom

Thiruvananthapuram

Respondent represented by : Sri. Bipin Sankar, Dy CE (TRAC), KSEB Ltd

Sri. K.G.P Nampoothiri, EE, TRAC, KSEB Ltd

Smt. Latha S V, AEE, TRAC, KSEB Ltd Sri. Anoop Mathew, SA, TRAC, KSEB Ltd

### Order dated 22.2.2017

- 1. M/s Ahalia Alternate Energy Pvt. Ltd, Palakkad (herein after referred to as M/s AAEPL or the petitioner) filed a petition before the Commission on 8.6.2016 for approval of power purchase agreement (hereinafter referred to as PPA) to be entered into between AAEPL and Kerala State Electricity Board Ltd (hereinafter referred to as KSEB Ltd) including tariff for the 8.4 MW wind power project at Elippara, Palakkad.
- 2. The Commission admitted the petition as Petition No. 10/2016 and hearing was conducted on 31.08.2016, at the office of the Commission.
- 3. Dr. K.K Sasi, Project Director, M/s Ahalia Alternate Energy (P) Ltd, presented the petition. The petitioner has submitted the following in the petition and in the hearing.

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- (i) A wind power plant was conceived in 2006 considering the strong wind potential in Palakkad Pass and decided to be installed with the help of M/s. Suzlon.
- (ii) ANERT granted permission to M/s AAEPL to install 4 wind turbine generators (WTG) each rated for 2.1 MW in Ahalia Health, Heritage and Knowledge Village (AHHKV) at Elippara near Kanjikode in Palakkad district vide orders, A.O.No.52/WPC/ANERT/15 and A.O.No.53/WPC/ANERT/15 dated 28.03.2015.
- (iii) By 27 March 2016, the four WTGs were commissioned after safety certification.
- (iv) Each WTG installed in a doubly fed induction generator (DFIG) rated for 2.1 MW at and above 14 m/s with a hub height of 90m. It has a cut in wind speed of 3.5 m/s and cut-off wind speed of 25m/s. The four WTGs are connected to 110 kV Substation of KSEB Ltd at Walayar by overhead lines through a Pooling Station in Ahalia campus.
- (v) The energy produced by the four WTGs is fed to the KSEB Ltd grid from the respective dates of commissioning of each WTG, and the above energy qualified for payment by KSEB LTD at a tariff to be decided by KSERC, once the power purchase agreement is executed between AAEPL and KSEB Ltd.
- (vi) As advised by KSEB Ltd, M/s AAEPL filed this petition, for approval of PPA and tariff. The draft power purchase agreement is attached along with the petition.
- (vii) NIWE has certified that the annual mean wind power density (WPD) at the site is 215.6 W/m<sup>2</sup> at 80m height. As per clause 30.4 of CERC Regulations, 2009 it corresponds to a capacity utilisation factor (CUF) of 20%. As per Annexure C (2014-15) of KSERC (Renewable Energy), Regulations, 2015, such CUF qualifies for a generic tariff of Rs. 6.34 per unit of energy.
- (viii) The project consisting of 4 X 2.1 MW WEGs and proposed to be operated under Independent Power Producer (IPP) category was commissioned during the months of February and March 2016 and has generated 71,95,264 units till 29.08.2016.
- (ix) The WTG is having a hub height of 90m and the wind density certified by NIWE is 215.6W/m<sup>2</sup> at 80m AGL. Hence the CUF of the project is 22% under wind zone 2 as per order of CERC dated 31.03.2015 in petition No SM/004/2015.
- (x) The petitioner prayed before the Commission to determine the tariff applicable to WEG project of the petitioner, and to approve the PPA to be executed between the petitioner and KSEB Ltd.
- 4. Sri. Bipin Sankar, Deputy Chief Engineer (Tariff and Regulatory Affairs Cell), KSEB Ltd presented the views of KSEB Ltd. The facts raised by KSEB Ltd during the hearing and also vide their written submission dated 30-08-2016 are:-

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- (i) The tariff for the wind energy projects commissioned in the State are governed by the provisions of Kerala State Electricity Regulatory Commission (Renewable Energy) Regulations, 2015.
- (ii) The certificate issued by NIWE produced by AAEPL certifying the annual mean wind power density at the site as 215.6 W/m2 at 80m height is not certified by ANERT, as stipulated in the Regulation 20(7) of the KSERC (Renewable Energy) Regulations, 2015.
- (iii) As per Regulation 17(4) of the KSERC(Renewable Energy) Regulations, 2015, the principles, norms and parameters specified by the Hon'ble Central Commission for the purpose of determination of tariff for the electricity generated from various categories of renewable sources of energy, as specified in the Central Electricity Regulatory Commission (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2012, as amended from time to time, may be adopted by the Commission for the purpose of determination of tariff under these regulations.
- (iv) The wind power density of 215.6 W/m2 comes under wind Zone-2 with CUF 22%, as per the Regulation 26 of the CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012 dated 6-2-2012.
- (v) KSEB Ltd had been purchasing electricity from Agali (13.80MW) and Koundickal (4.8MW) wind farms, both in Palakkad District and the average Plant Load Factor of these projects are above 25%. KSEB Ltd, therefore, requested to consider fixing CUF as 25%.
- (vi) The petitioner has not furnished the details of any financial assistance availed by it as stipulated in Regulation 24 of the KSERC(Renewable Energy)Regulations, 2015. KSEB Ltd requested to direct the petitioner to furnish the details of any financial assistance availed by the petitioner for implementing the project and also submitted that the same may be considered by the Commission in the determination of tariff.
- (vii) The Commission may direct the petitioner for sharing of CDM / carbon credits as per the CERC regulations.
- 5. The Commission vide the daily order dated 7.9.2016 in OP No. 10/2016 directed the petitioner to submit the draft PPA duly initialed by both the parties, after reaching a consensus on the conditions relating to date of commercial operation, sharing of CDM benefits etc. The Commission further directed the petitioner to submit the following documents on or before 23.09.2016.
  - (a) Details of financial assistance obtained for the project
  - (b) Details of any subsidies/incentives received for implementing the project.
  - (c) Declaration to the effect that benefit of accelerated depreciation is not claimed by the petitioner.
  - (d) Document on allocation given by ANERT for setting up of 4 WEGs as IPP.

- (e) Certification from ANERT classifying the project site to a particular wind zone.
- 6. KSEB Ltd, has submitted the draft PPA, duly signed by both the petitioner and the KSEB Ltd before the Commission. KSEB Ltd further submitted that,-
  - (i) M/s Ahalia Alternate Energy Pvt. Ltd has not submitted the revised approval from ANERT that all the four WEGs are in IPP mode till date.
  - (ii) Clause 8.2 and 8.4 have been modified by replacing the interest rates for delayed payments from SBI PLR to MCLR (Marginal Cost of Funds based lending rate).
- 7. KSEB Ltd also submitted the copy of the connectivity agreement executed between the petitioner and the Chief Engineer, Distribution North, KSEB Ltd., and the copy of the Grid connectivity certificate issued by the Deputy Chief Engineer, Electrical Circle, Palakkad to the grid connectivity of the four wind turbines.
- 8. In compliance of the order dated 7.9-2016, M/s AAEPL submitted that,
  - (i) A term loan amounting to Rs 31,92,27,066/- (Rupees Thirty One Crore, Ninety Two lakh, twenty seven thousand and sixty six only), has been availed from Federal Bank at the interest rate of 11%, for the project. The Manging Director contributed Rs 22, 31, 24,485/- (Rupees twentytwo crore, thirty one lakh, twenty four thousand, four hundred and eighty five only).
  - (ii) Accelerated Depreciation was not claimed and no subsidies/ incentives received for the implementation of the project.
- 9. Subsequently, on 17-11-2016 M/s AAEPL produced a certificate issued by M/s ANERT, that the Ahalia Campus site at Palakkad falls under Wind Zone-2 in line with CERC regulation.
- 10. Further, M/s Ahalia Alternate Energy Pvt Ltd vide the letter dated 21-12-2016 produced a copy of the order No. A.O.No.2018/WF/ANERT/2016 dated 21.12.2016, for changing one WEG of 2.1 MW sanctioned on CPP mode to IPP mode.

# **Analysis and Decision**

- 11. M/s. Ahalia Alternate Energy Private Limited, the petitioner, has filed this petition for approval of Power Purchase Agreement and Tariff of 8.4MW (4 X 2.1MW) Wind Power Project at Elippara, Kozhipara P.O., Palakkad.
- 12. KSEB Ltd had agreed to purchase power from the project at the tariff approved by the Commission. As per the details submitted, the Wind Electric Generators of M/s AAEPL were commissioned as detailed below.

Location	Wind Generator		Survey number and	Date of
No	Registration Number	Capacity	village	commissioning
2	KL-2015-2	2.1 MW	255/1 Elappulli	22-02-2016
1	KL-2015-1	2.1 MW	253/2 Elappulli	23-03-2016
3	KL-2015-3	2.1 MW	289/1 Elappully	23-03-2016
			531-7 Pudussery	
4	KL-2015-4	2.1 MW	East	23-03-2016

- 13. KSEB Ltd had submitted the Power Purchase Agreement duly initialled by both the M/s AAEPL and KSEB Ltd for approval. As per the article 6.8 of the PPA, the tariff for the power generated from the project shall be as per the KSERC (Renewable Energy) Regulation, 2015 notified vide the notification No. 442/CT/2015/ KSERC dated 11-11-2015.
- 14. The relevant provisions in the KSERC (Renewable Energy) Regulation, 2015 regarding the determination of tariff for wind projects are extracted below.
  - " 19. Preferential tariff.- The Commission may, by order notified in the official gazette, determine preferential tariffs applicable to the electricity generated from various categories of renewable sources of energy, either as generic tariff or as project specific tariff.
  - 20. Generic tariff for the electricity generated from renewable sources of energy.- (1) The Commission may determine, by order published in the official gazette, the generic tariff for each financial year for the electricity generated from various categories of renewable sources of energy in accordance with the principles, norms and parameters specified or adopted by the Commission as per regulation 17 above and the normative values of capital cost and rate of interest notified under the proviso under sub-regulation (2) of regulation 18.
  - (2) The generic tariff shall be determined on levelised basis for the useful life of the renewable energy project.

Explanation: 'Useful life' in relation to a unit of a generating station including evacuation system means the following duration from the date of declaration of commercial operation (COD) of such generating unit, namely:-

- (i) 35 years in the case of small hydro-electric projects having installed capacity below 5MW;
- (ii) 35 years in the case of small hydro-electric projects having installed capacity of and above 5 MW and up to and including 25MW;
- (iii) 25 years in the case of wind energy power projects;
- (iv) 25 years in the case of solar photo voltaic projects; and
- (v) such other period as decided by the Commission in the case of other renewable energy projects.
- (3) The generic tariff shall be applicable to the renewable energy projects commissioned during the financial year for which the generic tariff is determined under sub-regulation (1) above:

Provided that the generic tariff published by the Commission for a financial year shall be applicable provisionally to the renewable energy projects which are commissioned after the close of that financial year, till such tariff is revised by the Commission:

Provided further that, as soon as the generic tariff is revised by the Commission for the financial year in which the renewable energy project is commissioned, the revised generic tariff shall be assigned to such renewable energy projects for which provisional tariff is assigned as per the above proviso.

(4) The Commission shall, for the purpose of sale of electricity from each category of renewable energy source, fix the tariff period in respect of the generic tariff determined under sub-regulation (1) above and that made applicable to a particular renewable energy project under sub-regulation (3) above:

Provided that the tariff period fixed by the Commission under this clause shall be subject to the minimum duration as specified hereunder,-

- (i) in the case of small hydro projects with capacity below five megawatt, twenty five years;
- (ii) in the case of solar photo voltaic and solar thermal power projects, twenty years;
- (iii) in the case of bio mass gasifier and bio gas based power projects, fifteen years; and
- (iv) in the case of all other renewable energy power projects except those coming under clauses (i), (ii) and (iii) above, thirteen years.
- (5) The tariff period shall be computed from the date of commercial operation of the renewable energy generating unit.
- (6) The generic tariff for wind energy projects will be determined separately for wind zone -I, wind zone-II and wind zone-III, as classified by the National Institute of Wind Energy from time to time.
- (7) For claiming the generic tariff applicable to the wind energy projects in a wind zone, the project developer shall submit necessary and sufficient details for classification of the project into a particular wind zone class as validated by the National Institute of Wind Energy and certified by the State Agency for renewable energy namely the Agency for Non-conventional Energy and Rural Technology, Kerala (ANERT).
- 21. Procedure for determination of generic tariff for the electricity generated from renewable sources of energy.- (1) The Commission may, suo motu, determine for each financial year in a control period the generic tariff for the electricity generated from each category of renewable source of energy.
- (2) The Commission shall publish in its website a summary of the proposal for the determination of tariff as per sub-regulation (1) above and invite responses from all the stakeholders.
- (3) The Commission shall, after the expiry of a period of twenty one days from the date of publication of the proposal as per sub-regulation (2) above, conduct public hearing on such proposal.

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- (4) The Commission shall determine the generic tariff after duly considering the responses from the stakeholders and the views expressed in the public hearing.
- (5) The tariff determined as per sub-regulation (4) above shall be notified in the official gazette.
- (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.
- 22. Project specific tariff for the electricity generated from renewable sources of energy.- (1) The Commission may, on application from the project developer, determine by order, the project specific tariff for the electricity generated from the following categories of renewable energy projects in accordance with the principles, norms and parameters specified or adopted by the Commission as per regulation 17 above keeping in view the procedure for determination of tariff for generation projects as per the Kerala State Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2014,-
  - (i) municipal solid waste project; and
  - (ii) any other projects as decided by the Commission.
- (2) The tariff period for the projects for which the Commission determines project specific tariff, shall be as specified by the Commission in the tariff order.
- (3) The Commission may, on application from the generator or the purchaser of electricity from a renewable energy project, for which a project specific tariff has been determined under sub-regulation (1) above, revise such project specific tariff applicable to the said project and issue appropriate orders, in case the actual average capacity utilization factor for three consecutive years immediately following the date of commissioning of the said project varies due to site specific reasons, by more than ten percent of the capacity utilization factor adopted earlier for the determination of the project specific tariff applicable to that project.
- 23. Normative parameters and tariff applicable to the renewable energy projects commissioned during the financial years 2014-15 and 2015-16.-

Notwithstanding anything contrary contained in these regulations, 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 shall be as specified in the annexures attached to these regulations

- 24. Effect of financial assistance on the tariff of renewable energy.- (1) The Commission shall, while determining the tariff for the renewable energy projects, 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 the guidelines and methods specified by Central Commission.
- (2) 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 by him for the implementation of the renewable energy project."
- 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 subregulation (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.

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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 levellised 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 levellised 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:

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

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- 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.
- 20. Further, as per the Central Government vide the notification No. 53/10/2011/ WE dated 4-9-2013, a generation based incentive @Rs 0.50/unit is available to the wind producers. Further, tax holiday benefit upo 10 years is also available to the wind developers. As per the Regulation-24 of the KSERC (Renewable Energy) the petitioner has to provide all such details before the Commission. All such incentive schemes are offered by the Central Government considering the increase in cost of renewable energy compared to the energy produced from conventional sources.
- 21. 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.
- 22. The sub regulation (7) to Regulation-20 of the Renewable Energy Regulation, 2015, stipulates that 'For claiming the generic tariff applicable to the wind energy projects in a wind zone, the project developer shall submit necessary and sufficient details for classification of the project into a particular wind zone class as validated by the National Institute of Wind Energy and certified by the State Agency for renewable energy namely the Agency for Non-conventional Energy and Rural Technology, Kerala (ANERT)'.
- 23. ANERT vide the certificate No. 12402/WF/AAE/2014 dated 11-11-2016 has certified that, the WEG site of the petitioner at Palakkad falls under Wind Zone-2 (201-250 W/m2). Accordingly, the generic tariff applicable for the wind power projects established by M/s AAEPL is Rs 5.34/unit duly considering the benefit of accelerated depreciation.

- 24. ANERT vide the A.O No. 52/WPC/ANERT/15 dated 28-3-2015 had accorded sanction to establish 3 WEGs (3 x 2.1 MW) as IPPs and vide the approval A.O No. 53/WPC/ANERT/15 dated 28-03-2015, had sanctioned 1 WEG (1 x 2.1MW) as CPP. Subsequently, as requested by M/s AAEPL, ANERT vide the A.O No.218/WF/ ANERT/16/ dated 21-12-2016 had accorded sanction to change the one unit earlier sanctioned to be established under CPP mode to IPP mode. Hence, the generic tariff of Rs 5.34/unit is applicable for the entire electricity generated from the project from the date of commissioning of the 1<sup>st</sup> unit in 22-02-2016 as given in paragraph-12.
- 25. As per the initialled PPA by M/s AAEPL and KSEB Ltd submitted before the Commission, the PPA shall remain operative for a period of 13 years from the date of commercial operation. As per the first proviso to subregulation (4) of Regulation-20 of the KSERC (Renewable Energy) Regulation, 2015, the minimum duration of the tariff period is 13 years for wind projects. As detailed under paragraph-12 above, 3 units started commercial operation on 23-03-2016 and one unit started commercial operation on 22-2-2016. Hence the term of the agreement is 13 years from 23-03-2016. However, the generic tariff of Rs 5.34/unit is applicable for the entire energy supplied to KSEB Ltd from the commercial operation of the first unit on 22-2-2016.
- 26. The Regulation-30 of the KSERC (Renewable Energy) Regulations, 2015 deals with the sharing of clean development mechanism (CDM) benefits. The relevant portion of the regulations is extracted below.
  - "30. Sharing of clean development mechanism (CDM) benefits.- The benefits if any, received from clean development mechanism or such other programmes shall be shared between renewable energy generating unit and distribution licensee which purchases renewable energy from the said unit, in the following manner.-
  - (a) The entire benefits received from clean development mechanism or such other programmes during the first financial year after the date of synchronization of the renewable energy projects to the distribution system, shall be retained by the renewable energy generating unit.
  - (b) In the second financial year, ten percent of the benefits received from clean development mechanism or such other programmes shall be given to the purchaser of renewable energy and in subsequent financial years the share of benefits allocated to the purchaser shall be progressively increased at a rate of ten percent per annum till the share reaches fifty percent and thereafter the benefits shall be shared equally by the renewable energy generating unit and the purchaser of renewable energy."

The developer, M/s AAEPL shall avail the benefit of CDM and share the benefit with KSEB Ltd as provided under Regulation 20 of the KSERC (Renewable Energy) Regulations, 2015.

- 27. KSEB Ltd has the right to account the energy purchased from M/s AAEPL towards its Renewable Purchase Obligation.
- 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.
- 29. The modification made in Clause 8.2 and 8.4 in the PPA by replacing the interest rates for delayed payments from SBI PLR to MCLR (Marginal Cost of Funds based lending rate) is approved.
- 30. Further, the Commission desires to put on record that both KSEB Ltd and the petitioner shall operate the plant as per prudent utility practices and in accordance with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, Indian Electricity Grid Code (IEGC), and all other relevant rules and regulations in force from time to time.

#### Order of the Commission

- 31. After carefully considering the facts and submissions, the Commission here by 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 extend 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'.

Ordered accordingly. Petition is disposed of.

Sd/-K.Vikraman Nair Member Sd/-S. Venugopal Member Sd/-T.M. Manoharan Chairman

Approved for issue

Santhosh Kumar.K.B Secretary

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