

**N.30/13**

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

**Dated : 22<sup>nd</sup> January, 2015**

**Present:**

- |                               |          |
|-------------------------------|----------|
| 1. Sri M.R. Sreenivasa Murthy | Chairman |
| 2. Sri H.D.Arun Kumar         | Member   |
| 3. Sri D.B.Manival Raju       | Member   |

**ORDER**

**OP No.8/2013**

**BETWEEN :**

1. M/s Koppal Green Power Ltd.,  
H.No.1-88/1/102,  
102,ShanthiVanam, Kavuri Hills Extension,  
Hyderabad-500 081 and  
Project Office at State Highway,  
No.23, Karatagi,  
Koppal District. Karnataka-583 229  
Represented by Mr.M.Chandra Mohan, Managing Director
2. M/s Poweronicks Limited,  
1<sup>st</sup> Floor, 5-35/197, IE Kukatpally,  
Hyderabad-500072  
Represented by Mr.M.V.S.R. Prasad,  
Chairman & Managing Director ..... Petitioners  
Advocates: M/s Metro Lawyers Bangalore

**AND**

1. Government of Karnataka  
Represented by its Principal Secretary,  
Energy Department,  
Vikasa Soudha,  
Bangalore ... First Respondent
2. Power Company of Karnataka Ltd., (PCKL),  
Represented by its Managing Director,

Kaveri Bhavan,  
Bangalore.  
Advocates: ALMT Legal,

... Second Respondent

3. Karnataka Renewable Energy Development Ltd., (KREDL),  
No.19, Major Gen.AD Loganathan INA Cross,  
Queens Road,  
Bangalore – 560 052.

Represented by its Managing Director,  
Advocates: Sri.G.S.Kannur

... Third Respondent

4. Gulbarga Electricity Supply Company Ltd., (GESCOM),  
Opp: Hotel Parivar, Railway Station Road,  
Gulbarga

Represented by its Managing Director  
Advocates: Just Law

... Fourth Respondent

1. In this case M/s. Koppal Green Power Ltd. Karatagi, Koppal District and M/s Poweronicks Ltd. Siruguppa, Bellary District have jointly filed the petition praying for the following :

- i. Revise the landed cost of biomass fuel to Rs.3000/- per metric ton with 15% escalation annually;
- ii. Determine the fuel consumption at 1.80 kg/kWh on received basis keeping in view auxiliary consumption of 13%;
- iii. Determine the O&M expenses at 8 per cent of the capital cost;
- iv. Declare that the petitioners are entitled for Renewable Energy Certificates;
- v. Restrict / ban co-generation units and other high income / high end industrial units like distilleries from using or procuring bio mass from outside;
- vi. Permit the petitioners to go in for open access after obtaining necessary permissions and clearances; and
- vii. Pass such other orders as the Commission deems fit and proper in the circumstances of the case and in the interest of justice.

2. It is submitted by the petitioners that they are generating companies with biomass based power generating units each with a capacity of 6 MW and an exportable capacity of 5.4 MW. The petitioners are supplying power to the 4<sup>th</sup> Respondent GESCOM on the basis of the PPAs between them and "as per the

terms of the said Power Purchase Agreement at present the rate being paid is Rs.4.3524 per unit, as per the tariff determined by this Hon'ble Commission by its order dated 11.12.2009".

**3.** The first petitioner, M/s. Koppal Green Power Ltd., has submitted that it had earlier entered into a Power Purchase Agreement (PPA) with KPTCL during 2001. Subsequently the PPA was transferred to the fourth Respondent namely the Gulbarga Electricity Company Ltd., from 10.06.2005 and it is stated that at present the rate being paid is 4.3524 per unit as per the tariff order dated 11.12.2009. The second petitioner, M/s. Poweronicks Ltd., has submitted that it had entered into a Power Purchase Agreement (PPA) with KPTCL on 12.04.2001. Subsequently the PPA was transferred to the fourth respondent namely the Gulbarga Electricity Company Ltd., and the petitioner started supplying power from 10.06.2005. It is stated that at present the rate being paid is Rs.4.3524 per unit as per the tariff order dated 11.12.2009.

**4.** The petitioners have submitted that as per clauses 5.1 and 5.2 of the Power Purchase Agreement (PPA), the term of the PPAs is 20 years with the agreed tariff with an annual escalation of 5 % being valid for the first ten years. From the 11<sup>th</sup> year onwards till the end of the term of the PPAs, the tariff is to be decided by the parties. If the tariff offered by the respondents is not acceptable by the petitioners, they would be at liberty to sell the power to third parties after entering into necessary wheeling agreements with the respondents. The petitioners have further stated that the first ten year period has lapsed and agreements have been entered into on 24.3.2011 in respect of the balance term of the PPAs and the said agreements provide for "various contingencies determining the rights and duties and responsibilities and liabilities of the respective parties which are not in dispute".

**5.** The petitioners have further submitted that due to increase in the cost of biomass fuel and due to its non-availability, the PLF of the project has drastically reduced due to which the future of the power plants have become uncertain

unless remedial measures by way of increase in power tariff, etc., are allowed. In support of their prayer, the petitioners have urged the following grounds :

- i) The fuel cost and fuel consumption are two important factors that are to be considered while fixing the tariff in addition to other parameters such as RoE, O & M charges, interest etc. The Commission, while fixing the base tariff in the year 2009, in respect of power generated from bio-mass at Rs.3.66 / unit, had considered fuel cost at Rs.1280 / MT., although the landed cost was Rs.2000/MT in 2009. The Hon'ble CERC had approved fuel cost of Rs.1797/MT for Karnataka State in their tariff order dated 3.12.2009 and at present the landed cost is Rs.3000/MT and is on the rise. Thus, viewed from that angle also the base rate for fuel cost as on 01.01.2013 requires to be revised.

In support of their claim relating to biomass prices, the petitioners have submitted invoices relating to purchase of biomass fuel indicating prices in the range of Rs.2800 to Rs.3300 per MT.

- ii) The Government of Karnataka had fixed a rate of Rs.5.00 per unit for power supplied during the period from January 2009 to May 2009 in the order issued under Section 11 of the Electricity Act, 2003. While fixing the rate in similar circumstances, the Government of Karnataka had in April 2010 considered the cost of bio mass at Rs.2400/MT to arrive at the cost of biomass based power generation at Rs.4.99/Kwh. Today the cost of bio mass is more than Rs.3000/MT.
- iii) Due to acute power shortage and heavy demand, power rates in Indian Energy Exchange (IEX) for Southern Region are hovering around Rs.8 to Rs.9/Kwh. As the price of power has gone up by more than 100%, all the co-generation units and IPPs with open access are procuring biomass fuel at high prices as they sell power in IEX at a considerably higher rate. Thus, the petitioners which are selling power to ESCOMs at PPA rates are finding it extremely difficult to compete with them in obtaining biomass at high cost.

- iv) The fuel cost escalation during the last three years has been at an average rate of 15% per annum as against 5% escalation per annum assumed by the Commission in the order dated 11.12.2009.
- v) In the neighbouring State of Andhra Pradesh, co-generation plants are not allowed to procure other biomass fuels and such a policy should also be adopted in Karnataka.
- vi) The Commission had considered a specific fuel consumption of 1.16 kg/Kwh whereas KREDL, the nodal agency for development of renewable energy in the State, had estimated the specific consumption at 1.80 kg/Kwh.
- vii) The Gross Calorific Value (GCV) of 3600 Kcal/kg is on air dried basis and considering the moisture content, the GCV on received basis varies from 400 Kcal per kg with 80% moisture to 3300 Kcal/kg with 17.5% moisture. Thus the petitioner has requested for specific fuel consumption of 1.80 kg per unit considering higher moisture content in the range of 30 to 80%. It is submitted that as per the CEA report the specific consumption is 1.36 kg per unit on dry basis.
- viii) The KREDL and developers had proposed auxiliary consumption of 13%. But the Commission had approved only 9% as auxiliary consumption in the order dated 11.12.2009. In view of the fact that, the actual auxiliary consumption is about 13%, it is requested to consider auxiliary consumption at 13%.
- ix) At the time of tariff revision in 2009, KREDL and generators had requested for fixing the O & M expenses at 8% of the capital cost whereas the Commission had approved 5% of the capital cost as the O & M expenses. The petitioners have requested to revise the O & M expenses to 10% instead of 5% of the capital cost. It is submitted by the petitioners that the actual O&M expense is about 10% of the capital cost as the use of different bio mass fuels results in increased maintenance due to corrosion and erosion. Also, substantial manpower is required for fuel handling and replacement of boilers and other

machine parts which make the O & M expensive. Hence the petitioners have requested the Commission to consider a minimum rate of 8% of capital cost as O & M expenses.

**6.** On issue of notice, the Respondents 2, 3 & 4 have filed their objections/submissions in regard to the prayers made and the grounds urged by the petitioners.

**7.** The 2<sup>nd</sup> Respondent, M/s. PCKL, has contended that, the cost of acquisition of fuel including the transportation of biomass fuel does not necessitate any revision in the case of the petitioners' plants as they are strategically located in close proximity of rice mills and have entered into long-term contracts for supply of fuels at pre-determined fixed prices. It is also contended that the documents produced by the petitioners for claiming specific consumption of 1.80 Kg per unit are not credible. The reliance of the petitioners on the 2009 Tariff Order of the Commission cannot be considered as the order is applicable to the plants commissioned from the year 2010 onwards, while the petitioners' generating plants were commissioned earlier. It is further submitted that, the Petitioners have failed to produce any material evidence for claiming increased auxiliary consumption and O & M expenses.

**8.** The 2<sup>nd</sup> Respondent has further stated that in line with the tariff order dated 11.12.2009, the petitioners are entitled to a rate of Rs.4.3524 per unit being the tenth year tariff as per the PPAs entered into in March and April 2001 and supplemental PPAs entered with the 4<sup>th</sup> Respondent in November 2007 and January 2010 respectively. Hence the prayer of the petitioners for a higher tariff is liable to be rejected. Further, the PCKL has denied that the Power Exchange rate can be taken as a yardstick for determination of tariff for sources of Renewable Energy.

**9.** The 3<sup>rd</sup> Respondent, M/s KREDL has made no specific submissions relating to the two generating units of the petitioners. However, in general, it has stated that on account of the low tariff prevailing in the State, only about 90 MW capacity of biomass projects have been commissioned out of sanctioned capacity of about

250MW. Further, out of the commissioned plants only 10MW to 12MW of power only is being generated. Regarding the fuel cost, KREDL has submitted that the fuel cost has gone up from Rs.3000/MT to Rs.5000/MT. With dry fuel, the PLF would be in the range of 70% to 80%, otherwise it will be in the range of 50% to 60% and that, the cost of dried biomass is double the cost of high moisture biomass. It is suggested that the auxiliary consumption may go up to 30% and the O & M expense may be considered at 8% of the capital cost.

**10.** The 4<sup>th</sup> Respondent, GESCOM has submitted that, as the parties have already entered into binding contracts by mutual agreement, it would not be open to the Commission to revise the tariff at this juncture. In the case of M/s. Koppal Green Power Ltd., a supplemental agreement was entered into on 16.11.2007 in pursuance of a joint memo filed before this Commission on 4.8.2007 in which the parties had agreed to certain revised rates for the power supplied by the petitioners. Similarly, in the case of M/s. Poweronicks Ltd. also, the 4<sup>th</sup> Respondent GESCOM had entered into a supplemental agreement dated 30.1.2010 with the petitioner for a mutually agreed tariff starting with Rs.3.66 per unit in the year 2004-05 and going up to Rs.4.4330 per unit in the year 2011-12.

**11.** On the price of fuel, GESCOM has contended that the request of the petitioners for approval of fuel cost at Rs.3000/MT is untenable as no material evidence whatsoever is produced in support of the petitioners' claim. It has submitted that the invoices produced cannot be relied upon as most of them are unauthenticated, and the entities in whose names invoices are produced do not exist. Regarding escalation of fuel cost by 15% annually claimed by the petitioners, it is stated that the petitioners have long-term fuel supply agreements with rice mill owners and therefore the request is untenable. It is also stated that no material evidence is produced in support of such an increase. Regarding the averments of the petitioners on the high moisture content of biomass fuel, the 4<sup>th</sup> Respondent has submitted that the same is not a new development in the biomass sector necessitating interference by the Commission. It is also stated that the petitioners situated in GESCOM jurisdiction, an arid zone where the temperatures are high, are able to procure biomass like paddy husk, Juliflora and

Jowar stalks etc. which are essentially dry containing minimum moisture with high calorific value. It is also contended that the petitioners have not filed any material in support of their contention regarding the low calorific value and high moisture content of the fuel used by them.

**12.** In response to the submissions made by the Respondents, the first petitioner has filed a rejoinder, along with copies of vouchers for having purchased fuel from three suppliers, data sheet of PLF for the period October, 2011 to September, 2013 as also a copy of the CERC Order dated 25.10.2012 relating to parameters adopted for determination of tariff for biomass based projects. In the rejoinder the petitioners have denied the contentions of 4<sup>th</sup> Respondent that the vouchers in support of fuel prices produced earlier are false and the suppliers' firms do not exist. They have admitted having long term agreement for supply of fuel from various suppliers but have denied that they are able to obtain a steady supply of fuel from these sources. The petitioners have also submitted that the average cost of rice husk during 2011 which was Rs.1,621/MT had increased to Rs.3,000/MT by 2013 and the cost of firewood which was Rs.1,600/MT in 2011 had gone up to Rs.3,100/MT. The petitioners have further contended that on account of such increase in the cost of fuel, the PLF for the period between October 2011 and September 2013 has gone down to 37.5 % as per the month-wise statement submitted. The petitioners have denied other allegations made by the Respondents 2 and 4.

**13.** We have considered the contentions of the petitioners and the respondents on the various aspects of the case. In our view, the issues to be decided in this case are the following :

- (i) Whether the tariff at which the petitioners are being paid by the 4<sup>th</sup> Respondent is based on the norms adopted by the Commission in its generic tariff order dated 11.12.2009?
- (ii) If not, whether the tariff currently applicable to the petitioners' units needs to be revised?
- (iii) If so, in what terms?



**Issue No.(i) :**

**14.** This petition has been filed under the provisions of Sections 61, 62, 64 and 86 of the Electricity Act, 2003. The petitioners have prayed for revision of the tariff for the power generated by them by “revisiting the formula in fixation of tariff”. This Commission has issued KERC (Power Procurement from Renewable Sources by Distribution Licensees & Renewable Certificate framework) Regulations, 2011 repealing the KERC (Power Procurement from Renewable Sources by Distribution Licensees) Regulations, 2004. Clause 9 of the Regulations issued in 2011 deals with determination of tariff for Electricity from renewable sources of energy which reads as under:

*“9.1 Determination of Tariff for Electricity from renewable sources of energy:*

*Commission may determine at any time tariff for purchase of electricity from Renewable Sources of energy by Distribution Licensees either suo-motu or an application either by generator, or by distribution licensee.*

*Provided that the tariff approved by the Commission including the PPA deemed to have been approved under Section (2) of Section 27 of Karnataka Electricity Reform Act, 1999, prior to the coming into force of these Regulations shall continue to apply for such period as mentioned in those PPAs”*

A reading of Clause 9.1 shows that the Commission has the power to determine tariff at any time in respect of purchase of energy from Renewable Sources by Distribution Licensees either suo-motu or on an application by a Generator or by Distribution Licensees.

**15.** The Hon'ble APTEL in Appeal No.207 of 2013 has held in its judgment dated 19<sup>th</sup> September 2014 that the Commission has powers to reopen a concluded contract and revise the tariff as long as they promote renewable sources of energy as envisaged in the Electricity Act, 2003.

**16.** In the light of the above provisions, the petition was admitted and the Commission has proceeded to determine the tariff as discussed in this Order.

**17.** The grounds urged in the petition and the submissions made by the learned counsel for the petitioner clearly imply that the petitioners would like this Commission to revise the norms adopted while determining the Tariff Order for biomass based renewable energy units in its Order dated 11.12.2009. The Commission therefore needs to take a view on whether the petitioners have made out a case for revisiting the norms adopted by this Commission in its Order dated 11.12.2009 in so far as it applies to the units of the petitioners.

**18.** From the submissions made by the petitioners, it is seen that the petitioners entered into Power Purchase Agreements with the Karnataka Power Transmission Corporation Limited on 30.3.2001 in respect of M/s. Koppal Green Power Limited and on 12.4.2001 in respect of M/s. Poweronicks Limited. Both these agreements came to be terminated by KPTCL on 5.7.2003. Subsequently, the petitioners agitated the matter before the Hon'ble High Court of Karnataka and this Commission. During the pendency of the case, M/s. Koppal Green Power Limited negotiated a settlement with KPTCL and GESCOM, the 4<sup>th</sup> Respondent, and filed a Joint Memo before this Commission dated 4.8.2007 agreeing for revision of certain terms in the PPA mainly relating to the tariff applicable to the project for the period between 7.1.2005 and 30.3.2011. In pursuance of this settlement, a supplemental PPA was signed on 16.11.2007 between parties agreeing to a tariff beginning at Rs.3.66 per unit from 7.1.2005 and ending at Rs.4.3524 per unit on 30.3.2011. Except for the modification of the tariff, the main provisions in the original PPA dated 30.3.2001 were continued. Thereafter, the parties have also entered into a further Supplemental Agreement on 24.3.2011 in which Rs.4.3524 per kWh was agreed as the rate payable for power generated by the petitioner for the next ten years from 30.3.2011 without escalation which would be reviewed by the parties after 29.3.2021.

**19.** In the case of M/s. Poweronicks Ltd., also in similar circumstances the PPA dated 12.4.2001 was modified by a supplemental Agreement on 30.1.2010 after the Hon'ble Appellate Tribunal for Electricity upheld the order of this Commission regarding the validity of the PPA dated 12.4.2001. In this supplemental agreement, the parties have agreed to a tariff ranging from Rs.3.66 per kWh in the year 2004-05 to Rs.4.4330 per kWh in the year 2011-12 up to 11.4.2011. This

supplemental agreement was later replaced by a subsequent Supplemental Agreement 24.3.2011 in which a rate of Rs.4.3524 per kWh without escalation for the next ten years from 12.4.2011 was agreed between the parties. Other than this modification in the tariff, all other material terms of the original PPA dated 12.4.2001 were continued to be operative.

**20.** The above facts clearly go to show that the tariff applicable to the petitioners' power generation units as per the PPAs entered in March/April 2001, which was originally fixed as per the MNRE Guidelines, has come to be modified as a result of litigation and mutual negotiations. The tariff which is currently applicable to these two units was determined by mutual agreement at Rs.4.3524 per kWh without escalation for ten years from 12.4.2011 under the subsequent Supplemental Agreements signed by the parties in 2011. Therefore, it is clear that this Commission had not determined the tariff for these two units on the basis of the norms adopted by it in the Tariff Order dated 11.12.2009. Further, the said Tariff Order explicitly states in para 15 that for the PPAs which had already come into existence before 1.1.2010 the tariff and other terms and conditions as per those PPAs shall hold good for the period specified in the PPAs.

**21.** It is noted that the tariff determined in the 11.12.2009 Order of this Commission for biomass power projects is at Rs.3.66 per kWh for the first year going up to Rs.4.13 per kWh for the tenth year of the PPA. That tariff order also laid down that the tenth year tariff shall continue to be applicable from the eleventh year onwards till the end of the term of the PPA without any escalation. In contrast, the tariff applicable to the petitioners' units as agreed by the parties even on 1.1.2010 was Rs.4.2718 per kWh which was much higher than the tariff determined by the Commission on 11.12.2009. Therefore it is clear that the tariff determined by this Commission in its order of 11.12.2009 and the norms adopted therein have no relevance to the tariff agreed between the parties in the present case. Thus, the issue no.(i) is to be answered in the negative.

**Issue No. (ii) :**

**22.** The petitioners have claimed that they have not been able to achieve PLF adequate to make the projects viable because of the high cost of the biomass fuel. In response, the learned counsel for Respondents has contended that the

petitioner's units are operating at a high PLF and are also able to obtain adequate fuel on the basis of long term contracts with several rice mills, etc., who supply fuel to the petitioners' units. The Commission had in 2013 commissioned the services of a Consultant, The Energy Research Institute (TERI), to study the functioning of the various biomass based power plants in the State. According to the TERI Report, the two units of the petitioners were operating with a PLF of 90% (M/s. Koppal Green Power Ltd.) and 80% (M/s. Poweronics Ltd.) respectively. The TERI Report also confirms the existence of long term contracts with rice mills for supply of rice husk for the petitioners' units besides their own rice mills supplying fuel to the unit of M/s. Koppal Green Power Ltd. The petitioners have also admitted the existence of fuel supply contracts with Rice Mill Owners even though they have contended that the suppliers are not providing them with the required fuel regularly as they are seeking a higher price in view of the increase in the prices of the fuel in their areas.

**23.** In the light of the above facts, the Commission is of the view that a revisit of the norms adopted in our 11.12.2009 Order in respect of the petitioners' units is unwarranted as the tariff being paid to the petitioners is not based on the generic tariff order of this Commission. That the petitioners have on their own volition entered into agreements for a negotiated tariff without escalation for the next ten years is adequate to show that the petitioners were able to recover their costs of generation and the margins from the negotiated tariff at least at the time of entering the Renewal Agreement and sometime thereafter. It is possible due to increase in the price of biomass fuels their costs of generation at present may have gone up beyond their expectations. The Commission, therefore, would like to consider whether the agreed tariff in these cases needs to be revised in the interest of equity and to enable the petitioners to meet their operational costs even though the subsequent Renewal Agreements provide for a fixed tariff for ten years from 2011 onwards.

**24.** The tariff now being applied to the petitioners' units is based on the concept of a single-part tariff which bundles together both the fixed and the variable costs of operating the project. In order to come to a conclusion about the viability of

the project with the present tariff of Rs.4.3524 per kWh, it is necessary to assess the fixed and variable costs of these projects at present and for the remaining term of the PPAs. Since the fixed costs are based mainly on the capital cost of the project and the consequent debt servicing liability, return on equity, etc., we need to first determine the capital cost that would have been incurred for the petitioners' projects when they were established prior to 2005.

**25.** The petitioners' units were established in the year 2005 at which point of time the capital cost of the biomass based projects was determined at Rs.400 lakhs per MW as per the Tariff Order of this Commission dated 18.1.2005. Indeed, it is fair to assume that the actual capital cost of the petitioners' projects was even lower since these units had been constructed during the earlier tariff period and were only commissioned in the year 2005. If the capital cost and other costs forming part of the fixed cost component of these projects is computed as per the norms of the 2005 order, the fixed costs component of the tariff for the first ten years of operation will be an average of Rs.1.50 per kWh, based on the norms adopted in this Commission's generic tariff order dated 18.1.2005. (These norms included debt equity ratio of 70:30, interest on term loans at 11 % per annum, O&M expenses at 4% of the capital cost, etc.). On the other hand, if the fixed cost norms as per 2009 Tariff Order are adopted, with the capital cost determined at Rs.470 lakhs per MW, the average fixed cost during the first ten years of the projects will be Rs.1.81 per kWh. Even though these units were not established in 2009, in view of the fact that the negotiated tariff for the petitioners' units was Rs.3.66 per kWh beginning with 2005 which was equal to the generic tariff determined by the Commission for the first year, the Commission considers it appropriate to adopt the average fixed cost norm of Rs.1.81 per kWh as per the 2009 Tariff Order for the first ten years of the petitioners' units. Thus, the computed fixed cost component of the tariff for these units is arrived at Rs.1.81 per kWh. After deducting the fixed cost of Rs.1.81 per kWh from the present of Rs.4.3524 per kWh being paid to the petitioners, the balance of Rs.2.5424 per kWh is the margin available for covering the variable costs of the projects.

**26.** In the context of the petitioners' prayer for revising the cost of biomass fuels and in the process of determining generic tariff for renewable energy sources for the period from 1.1.2015 onwards, this Commission conducted public hearing after issuing discussion papers on various aspects of the tariff for biomass based projects. These issues are discussed in our generic tariff order for renewable energy dated 1.1.2015. According to the said order which adopts a two-part tariff structure for biomass based RE projects, the variable costs of biomass based generation are determined at Rs.2.82 per kWh for 2015 going up to Rs.3.34 per kWh in 2017-18. The variable cost for petitioners' units being mainly the cost of fuel, it is to be assumed at the same level as for the units to be set up in the tariff period between 1.1.2015 and 31.3.2018, which is Rs.2.82 per kWh for the first year going up to Rs.3.34 per kWh in 2017-18 as per the generic tariff order issued by this Commission on 1.1.2015. Adding this rate of the variable cost to the average fixed cost of Rs.1.81 per kWh as mentioned above, the tenth year tariff for the petitioners' units works out to Rs.4.63 per kWh in the year 2015. Therefore, we consider it reasonable to determine the revised tariff for the petitioners' units at Rs.4.63 per kWh for the year commencing on 1.1.2015 and going up to Rs.5.15 per kWh in 2017-18. The variable component of the tariff for these units shall be revised in future on par with the variable cost determined by the Commission for all biomass based projects for the period after 31.3.2018. Thus, the issue no. (ii) is answered in the affirmative. Further, issue no. (iii) is as determined in the above paragraph.

**27.** Since the tariff determined as above takes into account the fixed costs of the petitioners' units on the basis of the Tariff Order of 11.12.2009 and the variable costs as determined by this Commission in its order dated 1.1.2015, the tariff so arrived at covers all the costs of the petitioners' units in terms of the orders mentioned above. Therefore, it is not necessary to separately go into the other factors for determination of tariff like O&M expenses, auxiliary consumption, escalation of fuel costs, etc., for these units.

**28.** The prayer of the petitioners for grant of renewable energy certificates for the power supplied by them to the distribution licensee as per the PPAs is not

tenable as per the prevailing regulations which allow renewable energy certificates in respect of power sold to distribution licensees at average pooled power purchase cost [APPC] only. Further, their prayer for restricting procurement of biomass fuel by units other than power generating units in their operational areas is beyond the purview of this Commission.

### **ORDER**

In the light of the above, the petition is disposed of with the following terms:

- a) The tariff applicable to the petitioners' units with effect from 1.1.2015 shall be as shown below :

<b>Year</b>	<b>Tariff (Rs./kWh)</b>
2014-15	4.63
2015-16	4.79
2016-17	4.97
2017-18	5.15

The fuel cost after 31.3.2018 will be as may be determined by the Commission after taking into account the relevant factors.

- b) The terms of the PPA between the petitioners and the 4<sup>th</sup> Respondent shall be modified accordingly with effect from 1.1.2015.
- c) Other reliefs sought are rejected.

Sd/-

(M.R.Sreenivasa Murthy)  
Chairman

Sd/-

(H.D.Arun Kumar)  
Member

Sd/-

(D.B.Manival Raju)  
Member