

**KERALA STATE ELECTRICITY REGULATORY COMMISSION
THIRUVANANTHAPURAM**

Present: **Shri T.M.Manoharan, Chairman**
 Shri. K.Vikraman Nair, Member
 Shri. S. Venugopal, Member

OP No 21/ 2015

Petition in the matter of accreditation for 2x1.5 MW Iruttukanam Stage I Small Hydro-electric Project of Viyyat Power Private Limited commissioned on 18-09-2010 in Idukki District, Kerala, for registration for issue of Renewable Energy Certificates (REC)

**Viyyat Power Private Limited,
Kariyavattom P.O, Trivandrum- 695581** **- Petitioner**

**Kerala State Electricity Board Limited,
Trivandrum** **- Respondent**

Order Dated: 02.09.2015

T.M. Manoharan, Chairman.

1. The Petitioner is the developer of Iruttukanam Stage I (2x1.5) MW Small Hydro-electric Project (SHP). The petitioner had, on 31.12.2013, applied to M/s Agency for Non-conventional Energy and Rural Technology (ANERT), in accordance with the procedure approved by the Central Electricity Regulatory Commission (CERC) for the registration for Renewable Energy Certificate (REC). ANERT is the State agency designated by the Commission under the provisions of KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010. In exercise of its powers as the designated State Agency, ANERT has issued order A.O No. 48/REC/2015/ANERT dated 24.03.2015 rejecting the request of the petitioner for registration for REC, on the ground that the project did not meet the eligibility conditions. Aggrieved by the said order of ANERT, the petitioner has filed this petition with the following prayers,-

(i) The Commission may be pleased to set aside the Order A.O No.48/REC/2015/ANERT dated 24.03.2015 of ANERT and issue

accreditation of Petitioner's project Iruttukanam Stage I (2x1.5) MW for REC registration and REC mechanism.

- (ii) *The Commission may be pleased to make the Order effective from retrospective date of on line application i.e. 30.12.2013 or earlier since the Petitioner's project is eligible for REC mechanism right from the date of synchronizing i.e. from 18.09.2010, as per CERC Notification No. L-1/12/2010-CERC Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 dated 14.01.2010.*
- (iii) *Any other order the Commission may please deem fit.*

Hearing of the petition

2. The petition was admitted and a hearing was conducted on 01.07.2015. In the petition dated 08.05.2005, rejoinder dated 10.06.2015 and in the hearing, M/s Viyyat Power (P) Ltd submitted the following facts and arguments.
 - (i) In February 2003, Government of Kerala, represented by Energy Management Center (EMC) constituted under Department of Power, Government of Kerala offered thirty Small Hydro-electric Projects (SHP) for development on Build Own Operate and Transfer (BOOT) basis for a period of 30 years through bidding route. After due process of transparent bidding, Iruttukanam (2x1.5) MW project in Idukki District was allotted to the petitioner vide Government Order No. GO (MS)No.16/04/PD dated 21.06.2004
 - (ii) The concept of Renewable Energy Certificate (REC) was introduced by CERC as per the Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, which was notified vide CERC Notification No. L-1/12/2010-CERC dated 14.01.2010
 - (iii) The purpose of introducing REC mechanism was to promote additional investment in the renewable energy projects and to provide an alternative mode to the RE generators for recovery of their costs. This is clearly stated in regulation 1.1 of Second Amendment dated 10.07.2013 of the above said CERC Notification ie CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulation, 2013.The eligibility criteria is incorporated in Regulation 5 of the Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (hereinafter referred to as REC Regulations, 2010) which is reproduced below along with explanations

as to how Petitioner's project Iruttukanam Stage I (2x1.5) MW qualifies for REC

"CL 5. Eligibility and Registration for Certificates:-

(1) A generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for registration for issuance of and dealing in Certificates if it fulfills the following conditions:

(a) it has obtained accreditation from the State Agency;"

"b. it does not have any Power Purchase Agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Appropriate Commission; and

c. it sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price."

- (iv) The designated State Agency for Kerala is ANERT. Petitioner stated that Iruttukanam Stage I (2x1.5) MW fully complies with this clause, as the tariff in PPA is Rs 2.40/kwh (levellised) while the preferential tariff fixed by the Commission was Rs 2.44/ kwh (levellised) and hence the tariff is below the preferential tariff and therefore Iruttukanam Stage I (2x1.5) MW qualifies for REC as per clause (c) cited above.
- (v) Petitioner's project Iruttukanam Stage I (2x1.5) MW sells all the generated energy to KSEBL only .The pooled cost of power purchase (APPC) is Rs 3.24 / kWh whereas the PPA tariff is Rs 2.40/ kWh (levellised). Hence Iruttukanam Stage I (2x1.5) MW is eligible for REC. Thus the Petitioner's project Iruttukanam Stage I (2x1.5) MW is eligible for REC from all eligibility criteria.
- (vi) Petitioner has stated that the first Amendment to Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 dated 14.01.2010 was issued by CERC vide Notification No. L-1/12/2010 – CERC dated 29.09.2010. This Amendment temporarily debars for 3 years the eligibility of generating companies who have signed PPA for sale of electricity at preferential tariff, but which come out with premature termination of PPA for participation in REC mechanism. This is not the case of the petitioner's project Iruttukanam Stage I (2x1.5) MW.
- (vii) The petitioner has stated that the Second Amendment was issued on 10.07.2013 vide CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second

Amendment) Regulation, 2013 In the Second Amendment the eligibility criteria sub clause 5.1 (b) is modified as under:-

"b. it does not have any power purchase agreement for the capacity related to such generation to sell electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriated Commission"

- (viii) The petitioner has stated that he got the allotment from the Government through transparent bidding process based on Build Own Operate and Transfer (BOOT) basis. Hence when the project is built, the allottee (petitioner) becomes the owner of the project for the BOOT period of 30 years and there after the ownership has to be transferred to the Government. Hence all the commodities, tradable or otherwise, belongs to the owner during the BOOT period of 30 years. Ownership right is a fundamental right guaranteed by the constitution. The Petitioner has a PPA with KSEBL only to sell the "power generated by the Company" to KSEBL, i.e. only to sell electricity. This is crystal clear from the preamble of the PPA, Clause F reproduced below:-

"F. Board is now desirous of purchasing the power generated by the Company"

- (ix) Hence except the generated electricity nothing else is sold to KSEB Ltd and nothing else is purchased by KSEB Ltd. All commodities including Renewable Energy Certificates (REC) to fulfill RPO (Renewable Purchase Obligation) of the Licensee (KSEB Ltd) belongs to the Owner of the project. Unless REC is specifically purchased by KSEB Ltd from the Petitioner who is the Owner of the project, it will continue to belong to the Owner (petitioner) and not to KSEB Ltd.
- (x) Petitioner has further stated that the CERC vide clause 3.3 of the CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulation, 2013 dated 10.07.2013 expressed their views (reasons) for modifying Clause 5.1(b) , which makes the reasoning crystal clear

Section 3.3 "The Commission is of the view that the electricity component which is proposed to be sold at a rate determined under Section 62 or adopted under Section 63 of the Act should not be for the purpose of meeting renewable purchase obligation by the obligated entity as this would result in double redemption of the RECs. Accordingly, the Commission has agreed to the proposed amendment in the modified form as under:

"(b) it does not have any power purchase agreement for the capacity related to such generation to sell electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission."

The Commission has also made consequential change in Regulation 9 (2) (c) (i) by replacing the words "preferential tariff" by the words "tariff, for sale of electricity to an obligated entity for the purpose of meeting its renewable purchase obligation, determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission."

- (xi) Petitioner has further stated that CERC has modified clause 5.1(b) of Regulation,2010 dated 14.01.2010 in CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulation, 2013 dated 10.07.2013 because the Commission is of the view that electricity component which is proposed to be sold at a rate determined under section 62 or adopted under section 63 of the Act should not be for the purpose of meeting Renewable Purchase Obligation (RPO) by the obligated entity, as this would result in double redemption of the RECs. Therefore, it is clear that sale of electricity is only sale of electricity component and not automatic sale of REC for the purpose of meeting Renewable Purchase Obligation (RPO) by the obligated entity.
- (xii) Petitioner further stated that ANERT, vide letter No. 022/REC/VPPL/2014 dated 28.10.2014 informed the Petitioner that the Petitioner's project could not be accredited under the REC mechanism based on the following observations.
 - *"The tariff / PPA for the power project has been arrived at through a bidding process of KSEB, and hence as per Section 63 of the Indian Electricity Act, 2003 this becomes the tariff fixed by the Commission for the Project*
 - *The project is counted by KSEB under its RPO and your claim that the RE component was not covered under the agreement and hence not sold to KSEB under the agreement could also be applied in reverse, that, at the time of bidding which predated the Act, you had no provision to separate the RE and electricity and hence the whole benefit is transferred to KSEB under the PPA"*
- (xiii) In reply to ANERT's letter No. 022/REC/VPPL/2014 dated 28.10.2014, the Petitioner has submitted a detailed letter No. S/VPPL/ANERT/PDN/8400 dated 04.12.2014 to the Director ANERT clearly bringing out the errors and mistakes in their letter. Petitioner has stated that ANERT's observations are

erroneous, arbitrary and far from the facts of the case, as can be seen in the following paragraphs.

- (xiv) Regarding second para of ANERT's letter petitioner has submitted that, the tender was called by the Govt. of Kerala and not by KSEB and the bidding process is not of KSEB but by the Govt. of Kerala, Department of Power. This makes a sea of difference in the inference drawn in the second paragraph of ANERT's letter. The Petitioner has also attached Bid Document to prove that the tender was called for Build-Own-Operate and Transfer (BOOT) basis.
- (xv) The evaluation was done by EMC under Dept. of Power, Govt. of Kerala and the allotment was made by the Government vide Order no. GO(MS)No16/4/PD dated 21.06.2004. The bid tariff was Rs 2.40/Kwh (levellised). It is not correct to say that this tariff becomes the tariff "fixed" by the Hon'ble Commission (KSERC). This tariff was "adopted" by the Hon'ble Commission, whereas the preferential tariff was "fixed" by the Hon'ble Commission which was Rs 2.44/Kwh (levellised). Thus the bid tariff is lower than the preferential tariff "fixed" by the Commission and hence the project becomes eligible for REC mechanism.
- (xvi) Regarding third para of ANERT's letter petitioner has submitted that, inference is drawn by ANERT in the third para that KSEB has allotted the project to the Developer to build and generate power and supply to KSEB i.e. Build, Operate and Transfer (BOT) at a tariff fixed by KSERC. The developer has right only to get payment for the energy generated. Everything else of the project belongs to KSEB and therefore "*your claim that the RE component was not covered under the agreement and hence not sold to KSEB under the agreement could also be applied in reverse*", this, to say the least, is totally erroneous. The truth is that the Tender was called for Build – Own - Operate and Transfer (BOOT) basis for a BOOT period of 30 years. Therefore the Company is the owner of the project for the BOOT period of 30 years and hence all the commodities tradable or otherwise, gains and losses, all belongs to the company for the BOOT period and not to KSEB. The PPA Article 1.1 (c) clearly defines "BOOT" as Built–Own–Operate and Transfer. As per the tender and also as per the Implementation agreement signed by and between the developer and the Government of Kerala and also as per the PPA signed by and between KSEB and the developer (Petitioner), the developer is the owner of the project for the BOOT period and not KSEB. After the expiry of the BOOT period the project has to be handed over to the Government of Kerala and the ownership has to be transferred to the Government of Kerala. Petitioner further stated that, the developer is the owner of all the commodities, tradable or otherwise, including power, REC etc generated by the project during the BOOT Period. That is why KSEB had to sign a Power Purchase Agreement (PPA) to get the power from the developer. Had KSEB been the owner of the project a PPA was not called for

at all, as an owner never needs to purchase a commodity produced by him and it would have been merely a Power Utilization Agreement.

- (xvii) Petitioner has further stated that as per the PPA signed by and between the Developer and KSEB, the preamble Clause F reads as under:

“Board is now desirous of purchasing the power generated by the Company”

- (xviii) Petitioner has also stated that it is clear that the purpose of the PPA is to enable KSEB to “Purchase” the power and not anything else. This clearly recognizes that the developer is the owner of the Power generated which is purchased by KSEB as per the PPA. Similarly, any other commodity generated by the project including RPO or REC (Renewable Energy Certificate) need to be purchased by KSEB for their use to meet the Renewable Purchase Obligation of the obligated entity, otherwise KSEB cannot legally use it, Thus, it is very clear that “this could not be applied in reverse” as claimed in ANERT’s letter cited above. It could also be applied in reverse if and only if KSEB had been the owner of the project which is not true as seen above. Hence “If the project is counted by KSEB under its RPO as claimed in the ANERT’s letter” it is clearly illegal. KSEB cannot count on a project not owned by them in their RPO without purchasing the REC of the project, which is a tradable instrument. The owner has absolute right on all the commodities, tradable or otherwise produced by his plant. Unless a commodity is specifically sold it remains with the owner. The very purpose of REC mechanism is to promote and encourage generation of Renewable Energy and to provide an alternative mode to the RE generators of their cost as mentioned in the (Second Amendment) Regulation, 2013 itself. If a licensee is purchasing only the electricity, they will have to purchase Renewable Energy Certificate (REC) also from the generating company to fulfill their Renewable Purchase Obligation (RPO). Otherwise it is unfair, illegal and defeating the very purpose of the rule of law which created the REC mechanism.

- (xix) Petitioner has further submitted that ANERT’s order heavily rely on KSEBL’s letter No. CP.PlgIII/ Iruttukanam/2013-466 dated 06.03.2014 addressed to ANERT. KSEBL did not have the courtesy of giving the Petitioner a copy of this letter against repeated requests. Finally, the Petitioner obtained a copy of the said letter, after 8 months, through RTI forwarded by KSEBL vide forwarding letter No. D(RE&P)Plg5/RTI/Ptn19/14-15/302 dated 13.11.2014. In KSEBL’s letter the phrase “with the obligated entity for the purpose of meeting its Renewable Purchase Obligation” is conspicuously omitted from condition 5.1 (b)of CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulation, 2013again reproduced below for quick reading.

"b. it does not have any power purchase agreement for the capacity related to such generation to sell electricity, with obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriated Commission"

3. KSEB Ltd, in the hearing held on 01-07-2015 and also in the responses filed on 30-06-2015 and 10-07-2015 stated that CERC vide paragraph 3.5.2 of the Statement of Object and reasons to the REC Regulations, 2010, clarified as follows,-

"3.5.2 The Commission has considered the comments. The Commission would like to clarify that the regulations provide for issuance of REC only to renewable energy (RE) generators. The REC mechanism seeks to promote additional investment in the RE projects and is meant to provide RE eligible generators an alternative mode for recovery of their costs. The issuance of REC to obligated entities may result in forcing the RE developers to engage in PPAs only with local utility which in turn may affect new investment in renewable energy sources. Regarding eligibility criteria for CPPs the Commission would like to clarify that if a captive RE power project meets the eligibility criteria, sale of electricity from such projects over and above the captive consumption will qualify for RECs. As regards eligibility for existing RE generators tied up under long term PPAs, the Commission would like to underscore that the regulation cannot make any provision which directly or indirectly encourages breach of existing contracts."

As extracted above, the provisions in the REC Regulations, 2010, as amended clearly specified that, the RE generators who had entered into PPA with distribution licensee is not eligible for participating under REC mechanism

4. KSEB Ltd has further stated that the third amendment also clearly specified that, only if the PPA between the generator and obligated entity is for supplying electricity at the tariff approved for electricity component alone, the RE generator will become eligible for REC.

5. KSEB Ltd clarified further that;

(i) After enactment of REC Regulations, 2010, the distribution utilities can bid under Section 63 of Electricity Act, 2003 for procuring electricity from RE generator for electricity component alone so that the price derived through bid process shall be less than the actual cost of RE generation. ie., tariff less than the tariff determined by the appropriate commission under Sec 62 of the Electricity Act, duly considering various cost components including interest on debt, RoE, depreciation, O&M expenses, interest on working capital etc.

- (ii) In such cases, the RE generators is eligible for the sale of environmental components through REC , so that RE generators can recover a part of the cost through REC mechanism.
- (iii) In other words, the full recovery of cost of RE generator under such circumstances can be recovered only with the recovery of REC component along with electricity component.
- (iv) However no such REC facility was available prior to notifying the CERC (CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010
- (v) Hence the rate quoted by RE generator through the competitive bids initiated by the State Government / Distribution utility before enactment of REC Regulation shall definitely be the 'actual cost of generation' including the electricity and environmental component

6. KSEB Ltd stated further that CERC vide Statement of object and reasons to the Second Amendment to the REC Regulations, 2010 has further clarified as follows,-

3.3 Analysis and decision: The Commission considered various suggestions received which sought to differentiate between competitive bidding for electricity component and competitive bidding for renewable energy for meeting the renewable purchase obligation by an obligated entity.

Commission is of the view that the electricity component which is proposed to be sold at a rate determined under Sec 62 or adopted under Sec 63 of the Act should not be for the purpose of meeting renewable purchase obligation by the obligated entity as this would result in double redemption of REC. Accordingly, the Commission has agreed to the proposed amendment in the modified form as under:

"(b) it does not have any power purchase agreement for the capacity related to such generation to sell electricity , with the obligated entity for the purpose of meeting its renewable purchase obligation , at a tariff determined under Sec 62 or adopted under Sec 63 of the Act by the Appropriate Commission."

The Commission has also made consequential change in Regulation 9 (2)(c)(i) by replacing the words ' preferential tariff 'by the words 'tariff' , for sale of electricity to an obligated entity for the purpose of meeting its renewable purchase obligation., determined under Sec 62 or adopted under Sec 63 of the Act by the Appropriate Commission"

3.4 The following provision has been included in the final Regulations

6. Amendment to Regulation 9 of the Principal Regulations

"(1) In sub section (c) of clause (2) of Regulation 9 of Principal Regulations, the words 'preferential tariff' shall be substituted with the words 'tariff', for

sale of electricity including environmental attributes , determined under section 62 or adopted under Sec 63 of the Act by the Appropriate Commission.”

7. KSEB Ltd submitted that, as extracted above from CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and its amendments, it can be concluded that
 - (i) Renewable Energy Certificate (REC) mechanism is a market based instrument to promote renewable energy and facilitate renewable purchase obligations (RPO).
 - (ii) RE generators will have two options i) either to sell the renewable energy at preferential tariff or ii) to sell electricity generation and environmental attributes associated with RE generators separately.
 - (iii) The environmental attributes can be exchanged in the form of Renewable Energy Certificates (REC)
 - (iv) RE Generators with existing PPAs are not eligible for REC mechanism.
 - (v) REC mechanism cannot make any provision, which directly or indirectly encourages breach of existing contracts.
 - (vi) Regarding the contracts entered into between RE generators and Distribution companies before enactment of REC regulations by the Central Commission, CERC has clarified that ‘ such contracts are entered into with mutual consent by two parties at a point of time based on then prevailing terms and conditions. It has to be honoured unless both the parties mutually agrees to terminate the contract.
 - (vii) In the case of premature termination of contract by way of generators default, the RE generator is not eligible to participate in the REC mechanism for a period of three years from the date of termination of such agreement.
 - (viii) RE generators are allowed to sell the electricity components separately and sought for the environmental attributes through REC mechanism.
 - (ix) RE Generator would not be eligible for REC in respect of sale of such renewable energy, which include environmental attributes as distinct from electricity component, to a distribution licensee or trader or obligated entity.
 - (x) The distribution licensee is also eligible for REC, if it had procured RE in the previous year, at a tariff determined under Section 63 of the Act, in excess of the RPO as specified by the Appropriate Commission.

8. KSEB Ltd has further submitted that State Government had initiated the bidding process during the year 2004, ie much earlier than the CERC notified CERC (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, dated

14.01.2010. Prior to notification of this regulation there was no provision available for RE generators for segregating the cost of RE generation into (a) electricity component and (b) RE Component/ environmental attributes. Hence the tariff quoted by Viyyat Power (P) Ltd during the year 2004 for getting allotment of Iruttukanam SHP and finally for supplying power to KSEB after ensuring full recovery of entire cost including electricity component and environmental attributes. Considering this, M/s Viyyat Power is not eligible for REC for the electricity generated from Iruttukanam project due to the following reasons.

- (i) The State Government had initiated the bidding process and the Iruttukanam Project was awarded to the petitioner during the year 2004, ie much before CERC notified CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010
- (ii) The rate quoted by the bidder through bidding process included 'electrical component and environmental attributes.' Prior to the notification of CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, there was no regulatory process for segregating electricity component and environmental attributes separately.
- (iii) CERC has explicitly clarified that REC mechanism is not intended to encourage the breach of existing contracts directly or indirectly.
- (iv) Regarding the contracts entered into between RE generators and distribution companies before notifying the REC Regulations, 2010, the CERC has clarified that 'such contracts are entered into with mutual consent by two parties at a point of time based on then prevailing terms and conditions.. It has to be honoured unless both the parties mutually agrees to terminate the contract.
- (v) The PPA between the petitioner and KSEB for supplying power from Iruttukanam SHP was entered into between the parties by mutual consensus based on the following.
 - Guidelines issued by the State Government on developing SHP under IPP route vide G.O. MS 02/2003/PD dated 16-01-2003.
 - Govt order No G.O. MS No 16/04/PD dated 21-06-2004, on allotment of SHPs to IPPs
 - Implementation agreement entered into between State Government and the petitioner on 20-12-2004.
 - With the approval of the PPA by KSERC and State Government.
- (vi) At this stage the petitioner cannot withdraw from the agreement so entered into with KSEB based on the acceptance of the then prevailing rules, Government guidelines, orders, implementation agreements etc.

9. KSEB Ltd has further submitted that the petitioner raised the following points for claiming REC. Since the tariff as per the PPA was Rs 2.40/Unit levelised as

against the preferential tariff approved by the Commission was Rs 2.44/Unit and hence tariff for the project is below the preferential tariff and therefore Iruttukanam Stage – I (2x1.5 MW) would qualify for REC. Tariff Rs 2.40/Unit is levelised tariff quoted by the petitioner through bidding process initiated by the State Government. The tariff quoted by the petitioner ensures full recovery of cost of Iruttukanam project including electricity component and environmental attributes. As per provisions of the Electricity Act, 2003, the tariff derived through bidding process shall be final and KSERC has also adopted the tariff so arrived at. The petitioner has agreed to abide by the Government guidelines, orders on allotment and signed an implementation agreement with the State Government prior to signing PPA. The petitioner has entered into PPA with KSEB Ltd for supplying the power at the tariff as per bidding route.

10. KSEB Ltd has also submitted that the claim of petitioner that they are supplying electricity component only from Iruttukanam to KSEB Ltd is fundamentally wrong. The rate quoted by the petitioner for getting selection of Iruttukanam Project is the rate ensuring full recovery of entire cost of the project, including electricity component and environmental attributes. Prior to the notification of CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, there was no mechanism to segregate environmental attributes. KSEB Ltd submitted that the petitioner is, therefore, not eligible for claiming REC as per CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulations, 2013, and the petition filed may be summarily rejected.

Analysis

11. While considering the claims and prayers of the petitioner, the scheme of law relating to renewable energy and renewable energy certificates in Kerala has to be examined in order to appreciate their objectives and principles and to apply them to the present case.
12. Harnessing of renewable energy sources is an essential component of the strategies accepted and adopted all over the world, to combat the problems relating to global warming and climate change. It is inevitable to adopt such strategies and to implement plans to ensure sustainable development and inter-generational equity in using natural resources, which are essential for maintaining the environment congenial to continued existence of mankind and other life forms on earth. Our nation has also adopted policies and action plans in tune with the global strategies for conservation of the nature and natural resources. National Action Plan for Climate Change (NAPCC), which was announced by the Prime Minister on 30.06.2008, envisages at several action plans and projects to minimize the deleterious effects of global warming and climate change. One of such action plan is to accelerate harnessing of renewable energy with a view to reducing

consumption of coal and other fossil fuels for generation of electricity. NAPCC had set the target for generation of electricity from renewable sources, at 5% of the total consumption of electricity in the country for the financial year 2009-10. It was also stipulated that the said target will be increased by one percent every year, for next 10 years so that the share of renewable energy would reach 15% by 2020.

13. Indian legal system relating to renewable energy has also been formulated to strengthen the strategies and to accelerate implementation of the action plans for achieving the national imperatives relating to sustainable development, conservation of nature and natural resources and energy security for all citizens of the nation. There are provisions to incentivize harnessing of renewable energy and to prevent misuse of the schemes for such incentives.
14. The Electricity Act, 2003, has necessary provisions to promote renewable energy. One of the important functions of State Electricity Regulatory Commission is to promote co-generation and generation of electricity from renewable sources. Clause (e) of sub-regulation (1) of Section 86 of the Act is quoted hereunder.

86. (1) The State Commission shall discharge the following functions, namely: -

- (a)
- (b)
- (c) ...
- (d)

(e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licence;

15. Further clauses (h) and (i) of Section 61 of the Act, which authorize the Commission to specify the terms and conditions for determination of tariff, state as follows

61. The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-

- (a)
- (b)
- (c)
- (d)
- (e)
- (f)
- (g)

(h) the promotion of co-generation and generation of electricity from renewable sources of energy;

(i) the National Electricity Policy and tariff policy:

Section 66 of the Act stipulates that the appropriate Commission shall endeavour to promote the development of a market (including trading) in power.

16. The Tariff Policy issued by Government of India under Section 3 of the Act vide notification No. 23/2/2005 –R&R dated 06.01.2006 has also necessary provisions to promote renewable energy. Relevant provisions in Tariff Policy, 2006 are quoted hereunder. Clause 6.4 of Tariff Policy is quoted hereunder.

Clause 6.4 of Tariff Policy No 23/2/2005-R&R (Vol III) dated 6th January, 2006 resolves

"Non-Conventional sources of energy generation including Co-generation:

(1) Pursuant to provisions of section 86(1)(e) of the Act, the appropriate commission shall fix a minimum percentage for purchase of energy from such sources taking into account availability of such resources in the region and its impact on retail tariffs. Such percentage for purchase of energy should be made applicable for the tariffs to be determined by the SERCs latest by April 1, 2006.

It will take some time before non-conventional technologies can compete with conventional sources in terms of cost of electricity. Therefore procurement by distribution companies shall be done at preferential tariffs determined by the Appropriate Commission.

(2) Such procurement by Distribution Licensees for future requirements shall be done, as far as possible, through competitive bidding process under Section 63 of the Act within suppliers offering energy from same type of non-conventional sources. In the long –term, these technologies would need to compete with other sources in terms of full costs.

(3) The Central Commission should lay down guidelines within three months for pricing non-firm power, especially from non-conventional sources, to be followed in cases where such procurement is not through competitive bidding".

17. As per the provisions of the Electricity Act, 2003 and of the Tariff Policy, the Commission has to specify,
- (i) Percentage of renewable energy sources to be generated or purchased by Licensees
 - (ii) The maximum tariff that can be allowed for purchase of the renewable energy generated from different categories of renewable energy sources.
 - (iii) The norms and methodology for determination of tariff.

The Commission has also to approve the purchase of renewable energy under bid process as per Section 63 of the Act. Further the Commission has to assess the impact of procurement of renewable energy on the tariff payable by the consumers.

18. As early as in 2002, Government of Kerala in Science, Technology and Environment Department had, as per G.O (MS) 16/2002/STED dated 03.04.2002, issued a Renewable Energy Policy. This policy was issued with a view to promoting and accelerating the generation and consumption of renewable energy, in the circumstances which prevailed in the State in those days. As per the provisions in the Renewable Energy Policy, preferential price was fixed for renewable energy. KSEB Ltd had to undertake augmentation of sub-stations and transmission line required for evacuation of renewable energy. Facility for banking renewable energy was given and surplus energy after captive consumption was offered at average selling rate to KSEB Ltd. Uniform concessional wheeling charge at a rate of 5% of energy fed into the grid, including transmission loss was also given to renewable energy generators. The said policy also contained provisions for mandatory renewable energy based captive power plants for large industrial units with contract demand of and above 2000 kVA. This provision is in fact a mandatory renewable generation obligation. Clause 4.18 of the policy deals with green pricing and it states that choice of green pricing is given to interested consumers, who choose to pay extra for the energy generated from renewable energy sources (green energy).
19. After the enactment of Electricity Act, 2003, and issuance of regulations relating to renewable energy thereunder, those provisions in the Renewable Energy Policy, 2002, which are repugnant to or inconsistent with the statutory provisions in Electricity Act, 2003, and the rules and regulations issued thereunder, have become inoperative. But the other provisions are still valid and operative.
20. It can be seen from the provisions relating to renewable energy in Electricity Act, 2003, and in the Tariff Policy that the Parliament had only expressed the legislative intentions and the Central Government had only expressed the broad guiding principles for the promotion of renewable energy. In tune with the statutory provision and policy guidelines, the CERC and the SERCs have formulated and issued a large number of regulations relating to renewable energy. These regulations, in general, provide for determination of preferential tariff, renewable energy purchase obligation, mandatory open access, banking and wheeling and such other promotional measures. Several amendments have also been issued to such regulations with a view to incentivizing the generation of renewable energy and preventing the misuse of such incentives. All such regulations issued by CERC and SERCs along with the statutory provisions and the policy guidelines, provide a stable legal system for efficient development and use of renewable energy. It is worthwhile to examine the evolution of renewable energy regulations in the State.

21. KSERC has issued the following regulations to promote and accelerate the development of projects to harness electricity from renewable energy sources and co-generation plants.
 - (1) KSERC (Power Procurement from Renewable Energy Sources by Distribution Licensees) Regulations, 2006 (Notification No.1/1/KSERC-2006/XV dated 24.06.2006)
 - (2) KSERC (Power Procurement from Renewable Energy Sources by Distribution Licensees) (First Amendment) Regulations, 2008 (Notification No.KSERC/III/Regulation/2008 dated 18.11.2008)
 - (3) KSERC (Power Procurement from Renewable Energy Sources by Distribution Licensees) (Second Amendment) Regulations, 2010 (Notification No.1163/CT/2010/KSERC dated 22.11.2010)
 - (4) The KSERC (Power Procurement from Co-generation Plants by Distribution Licensees) Regulations, 2008 (Notification No. KSERC/III/Regulations dated 19.11.2008)
 - (5) KSERC (Power Procurement from Solar Plant by Distribution Licensees) Regulation, 2008 (Notification No. KSERC/III/Regulation dated 01.01.2009)
 - (6) KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 (Notification No.1517/CT/2010/KSERC dated 03.11.2010)
 - (7) KSERC (Power Procurement from Renewable Energy Sources by Distribution Licensees) Regulations, 2013 (Notification No. 442/CT/2012/KSERC dated 01.01.2013)
 - (8) KSERC (Grid Interactive Distributed Solar Energy Systems), Regulations, 2014 (Notification No. 2096/KSERC/CT/2014 dated 10.06.2014).
22. As per the provisions of KSERC (Power Purchase from Renewable Energy by Distribution Licensees) Regulations, 2006 and its amendments, the distribution licensees were made obligated entities and their Renewable Energy Purchase Obligation (RPO) was fixed at 5% of the total consumption during that year. A source wise break up of renewable energy was also specified as follows;
 - (1) From SHP – 2%
 - (2) From Wind Energy – 2%
 - (3) From other renewable energy – 1%
23. Priority in purchase of renewable energy was fixed based on the date of commercial operation of the renewable energy plant. The regulation also provided for mandatory open access to transmission or distribution system for the renewable energy generators. Regulation 5 authorizes the Commission to determine preferential price for each category of renewable energy in accordance with the guidelines stipulated therein.
24. The KSERC (Power Purchase from Solar Plant by Distribution Licensees) Regulation, 2008, specifies various measures to encourage the development of

grid quality solar power, such as mandatory open access to transmission and distribution systems of licensees, norms and methodology for determination of preferential tariff for solar energy and such other matters relating to harnessing of solar energy. Sub-regulation 5 (2) specifies as follows,-

"5 (2) Commission shall, as far as possible, be guided by the principles and methodologies if any specified by the CERC, National Electricity Policy and Tariff Policy while deciding the terms and conditions of tariff for solar power plants."

25. The KSERC (Power Purchase from Co-generation Plants by Distribution Licensees) Regulations, 2008 contains provisions relating to fixation of preferential tariff, open access and such other matters, which are more or less similar to the provisions in The KSERC (Power Purchase from Solar Plant by Distribution Licensees) Regulation, 2008.
26. The KSERC (Renewable Purchase Obligation and its Compliance) Regulation, 2010 specifies provisions relating to Renewable Energy Purchase Obligation (RPO) and its compliance. This regulation defines obligated entity as a distribution licensee or a captive generator or an open access consumer. Considering the special circumstances and the problems relating to harnessing of renewable energy in the State, the Commission had decided to revise the renewable energy purchase obligation of the obligated entities which was fixed at 5% as per the provisions in KSERC (Power Procurement from Renewable Energy Sources by Distribution Licensees) Regulations, 2006. As per the provisions in KSERC (Renewable Purchase Obligation and its Compliance) Regulation, 2010, the overall renewable purchase obligation of an obligated entity is fixed at 3% of its annual consumption. This regulation specifically provides for a solar renewable purchase obligation, which is fixed at 0.25% out of the overall renewable purchase obligation of 3%. It was also specified that the renewable purchase obligation will increase by 0.3% every year (10% of the base RPO of 3%), till the renewable purchase obligation reaches 10% of the total consumption. It has also been provided that while computing renewable purchase obligation of any obligated entity, the purchase of renewable energy being made by the obligated entity, should also be included. Regulation 4 deals with Renewable Energy Certificate (REC), which should be purchased by the obligated entities, to make-up the shortage in the quantum of purchase of renewable energy to meet the specified renewable purchase obligation. Regulation 4 is quoted hereunder.

"4. Certificates under the regulations of the Central Commission.-

(1) Subject to the terms and conditions in these regulations the Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 shall be the valid instruments for the discharge of the mandatory obligations set

out in these Regulations for the obligated entity to purchase electricity from renewable energy sources.

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificate.

(2) Subject to such direction as the Commission may give from time to time, the obligated entity shall act consistent with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 notified by the Central Commission in regard to the procurement of the certificate for fulfillment of the Renewable Purchase Obligation under these regulations.

(3) The Certificate purchased by the obligated entities from the power exchange in terms of the regulation of the Central Commission mentioned in clause (1) of the Regulation shall be deposited by the obligated entities to the Commission in accordance with the detailed procedure issued by the Central Agency.

27. Regulation 5 provides for designation of State Agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under these regulations. Regulation 6 which deals with effect of defaults in respect of RPO on the part of the obligated entities and authorizes the Commission to enforce the RPO on the obligated entities.
28. The KSERC (Power Purchase from Renewable Energy by Distribution Licensees) Regulations, 2013, specified the renewable purchase obligation of distribution licensees for 2010-11 onwards. In tune with the provisions in the KSERC (Renewable Purchase Obligation and its Compliance) Regulation, 2010, the overall renewable purchase obligation of a distribution licensee for 2010-11, is fixed at 3% of the total consumption of electricity, within its area of licence (as per regulation 3 of the 2013 regulations). It has been further specified that, out of the overall renewable purchase obligation of 3% of the total consumption, 0.25% shall be from solar energy sources. It is also specified that the renewable purchase obligation will increase by 10% of the overall renewable purchase obligation of 3% of the total consumption, till it reaches 10%. This regulation does also provide for mandatory open access and specifies methodology and norms for fixation of preferential tariff subject to the guidelines in sub-regulations 5 (3), 5 (4).
29. The KSERC (Grid Interactive Distributed Solar Energy Systems) Regulations, 2014 was notified mainly for promoting grid interactive solar energy generation in

view of the fact that the off-grid solar systems with storage battery are prohibitively costly. The management of scrap batteries would also be a problem if its number increases inordinately. Therefore it was felt that a regulation to promote grid interactive solar systems would be a welcome step. These regulations were applicable to solar energy systems of and above one kWp and up to and including one MWp. Mandatory open access has been provided to the solar energy generators at LT and HT level (regulation 5 and 6). Banking facility has been made available to the eligible consumers as per regulation 7. Provisions for net metering and solar meter have been included in regulations 9 and 10. As per regulation 12 the eligible consumer is given the right to wheel the excess energy generated in one premises for his use in another premises. Solar energy is exempted from banking charges and cross subsidy surcharges.

30. All the regulations issued for promoting renewable energy have to be implemented in the right spirit by the licensees as well as by the generators. Unless the implementation is monitored and appropriate follow up action taken, the regulations may not yield the desired results. In this context, the provisions in KSERC (Renewable Purchase Obligation and its Compliance) Regulation, 2010, assume more importance. Regulation 4 of the said regulations deals with renewable energy certificates for meeting the RPO as provided in the CERC Regulations. It would only be appropriate to examine the genesis and philosophy of the regulations issued by CERC, relating to Renewable Energy Certificates. Paragraphs 1.1 and 1.2 of the Explanatory Memorandum of CERC Regulations on Recognition and Issuance of Renewable Energy Certificate for Renewable Energy generation will throw light on the evolution of Renewable Energy Certificate Mechanism. These paragraphs are quoted hereunder.

1.1 India is gifted with abundant potential of Renewable Energy, which includes wind energy, biomass, small hydro, solar etc. Over the last few years India has experienced significant development in the Renewable Energy (RE) Sector. This development is precipitated by the effective national and state level policies. At present India has reached to an installed capacity of 14,914 MW (upto 31.July.2009) which is about 8.5% of the total capacity.

1.2 However, it should be noted that, in terms of actual generation from the Renewable energy Sources the share is estimated to be 3.5% of the total generation. The installed capacity of renewable energy sources in India is dominated by wind, constituting around 70% of the total RE installed capacity and the contribution of solar is very low. Though India has a huge potential in renewable energy, the gap between its gross renewable energy potential and the cumulative installed capacity is still huge. Also the distribution of these renewable sources is not uniform across the country. Some states are rich in

terms of renewable potential while some others have very little potential to explore. These challenges restrict holistic development of renewable energy potential and demand suitable mitigating mechanism.

31. The Forum of Regulators (FOR), constituted under Section 166 (2) of the Act for harmonization, coordination and ensuring uniformity of approach amongst Regulatory Commissions across the country, in its report on “Policies on Renewables” had also made the following recommendations.
 - *Mechanism for inter-state transaction of RE sources is necessary for recognising procurement of RE from one state to other state for complaisance of Renewable Purchase obligations.*
 - *A suitable mechanism like Renewable Energy Certificate (REC) is necessary to promote RE sources on the scale envisaged in the National Action Plan on Climate Change.*
32. The CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, (hereinafter referred to as REC Regulations, 2010) introduced Renewable Energy Certificates (REC) as a market based instrument to promote renewable energy and facilitate renewable purchase obligations. The renewable energy produced by the generators has two components namely, an electricity component and an environmental benefit component. This environmental benefit component is called the REC component. The renewable energy generators have the option to sell the above components jointly or separately. The renewable energy is comparatively costlier when compared to the electricity generated by conventional methods. Therefore the Electricity Regulatory Commissions fix a preferential tariff for the renewable energy, which is inclusive of both electricity component and environmental benefit component. As per the provisions in the Electricity Act, 2003, the Commissions have fixed renewable energy purchase obligation (RPO) to all the distribution licensees. In view of the high cost of renewable energy, the distribution licensees will be tempted to restrict the purchase of renewable energy just enough to meet their RPO. Therefore the renewable resource rich states will not be in a position to harness renewable energy to their full potential, for want of purchasers for the renewable energy at higher cost. Further cost of renewable energy from different sources would also be different. With a view to overcoming this problem the renewable energy generators are given option to sell the electricity component and REC component separately. It is to facilitate the separate sale of REC component of renewable energy, the REC scheme has been introduced by the CERC taking into consideration the report furnished by the Forum of Regulators. The salient features of the REC framework which are explained in the ‘Statement of objects and Reasons’ to the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, are quoted hereunder.

- Renewable Energy Certificate (REC) mechanism is a market based instrument to promote renewable energy and facilitate renewable purchase obligations (RPO).
 - REC mechanism is aimed at addressing the mismatch between availability of RE resources in state and the requirement of the obligated entities to meet the renewable purchase obligation (RPO).
 - Cost of electricity generation from renewable energy sources is classified as cost of electricity generation equivalent to conventional energy sources and the cost for environmental attributes.
 - REC will be issued to the RE generators for 1 MWh of electricity injected into the grid from renewable energy sources.
 - REC would be issued to RE generators only.
 - REC could be purchased by the obligated entities to meet their RPO under section 86 (1) (e) of the Act. Purchase of REC would be deemed as purchase of RE for RPO compliance.
 - Grid connected RE Technologies with minimum capacity of 250 KW and approved by MNRE would be eligible under this scheme.
 - RE generations with existing PPAs are not eligible for REC mechanism.
 - SERC to recognize REC as valid instrument for RPO compliance.
 - SERC would define open access consumers, captive consumers as obligated entities along with distribution companies.
 - SERC to designate State agency for accreditation for RPO compliance and REC mechanism at State level.
 - CERC to designate Central Agency for registration, repository, and other functions for implementation of REC framework at national level.
 - Only accredited project can register for REC at Central Agency.
 - Central Agency would issue REC to RE generators for specified quantity of electricity injected into the grid.
 - REC would be exchanged only in the CERC approved power exchanges.
 - Price of electricity component of RE generation would be equivalent to the weighted average power purchase cost of the discom including short term power purchase but excluding renewable power purchase.
 - REC would be exchanged within the forbearance price and floor price. This forbearance and floor price would be determined by CERC in consultation with Central agency and FOR from time to time.
 - In case of default SERC may direct obligated entity to deposit into a separate fund to purchase the shortfall of REC at forbearance price.
 - However, in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to the next year.
33. Sub-regulation (1) of Regulation 5 of the REC Regulations, 2010, which specifies the eligibility criteria for RE generators to participate in the REC mechanism, is quoted hereunder.

“5. Eligibility and Registration for Certificates:

(1) A generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for registration for issuance of and dealing in Certificates if it fulfills the following conditions:

- a. it has obtained accreditation from the State Agency;
- b. it does not have any power purchase agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Appropriate Commission; and
- c. it sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price.”

Regarding the eligibility criteria for the RE generators to participate in the REC mechanism, the CERC, vide the paragraph 3.5.2 of the Statement of Object and Reasons to the REC Regulations, 2010, has clarified as follows.

“3.5.2 The Commission has considered the comments. The Commission would like to clarify that the regulations provide for issuance of REC only to renewable energy (RE) generators. The REC mechanism seeks to promote additional investment in the RE projects and is meant to provide to RE generators an alternative mode for recovery of their costs. The issuance of REC to obligated entities may result in forcing the RE developers to engage in PPAs only with the local utility which in turn may affect new investment in renewable energy sources. Regarding eligibility criteria for CPPs, the Commission would like to clarify that if a captive RE power project meets the eligibility criteria, sale of electricity from such project over and above the captive consumption will qualify for RECs. As regards the eligibility for existing RE generators tied up under long term PPAs, the Commission would like to underscore that the regulation cannot make any provision which directly or indirectly encourages breach of existing contracts.”.

34. In the detailed procedure submitted by National Load Despatch Centre (the Central Agency) and approved by the CERC also it has been stated as follows,-

2.1. This procedure shall be applicable to all the generating companies including Captive Power Producer (CPP) based on renewable energy sources (herein after called Generating Company/eligible entity) engaged in generation of electricity from renewable energy sources such as small

hydro, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban or municipal waste and such other sources as recognised or approved by Ministry of New and Renewable Energy for their Renewable Energy Power Projects subject to fulfilment of eligibility conditions for participating in REC mechanism on or after April 1, 2010 in accordance with the provisions stipulated under the CERC REC Regulations.

35. Thus the REC scheme came into existence on 01.04.2010 and it is applicable only to
- (1) RE generators recognised or approved by Ministry of New and Renewable Energy, subject to fulfilment of eligibility conditions for participating in REC mechanism in accordance with the provisions stipulated under the REC Regulations, 2010 and
 - (2) The RE generators functioning before 01.04.2010 will be eligible for the benefits under REC mechanism only if they have not entered into long term power purchase agreement.
36. Subsequent to the notification of the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, concerns were raised from various quarters that the renewable generators having an existing PPA with distribution utilities for sale of electricity at preferential (cost plus) tariff might attempt to breach the existing contracts with the sole objective of making profits through REC mechanism. Further, apprehensions were also raised regarding the eligibility of captive generators based on renewable energy for participating in REC mechanism. To address these issues, Central Commission vide notice No. L-1/12/2010-CERC Dated: 29th September, 2010 issued CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (First Amendment) Regulations, 2010 wherein the objective of CERC regarding the validity of existing PPAs and eligibility of REC have been defined. In the statement of objects and reasons to the said regulation, the CERC has observed as follows,-

"The Commission has carefully considered these comments and decided that REC mechanism should not encourage breach of existing contract. In fact, various deterrents have been provided in the amendment of dissuade perverse incentive to breach and dishonour the existing contract. The existing contract entered into with mutual consent by two parties at a point of time based on the prevailing terms and conditions should be honoured unless both the parties mutually agree to terminate

the contract. The main objective of REC mechanism is to encourage new capacities addition.”

37. The CERC in its endeavor to strengthen the REC framework and to address some of the design issues and to remove ambiguities which were affecting its implementation, issued the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulations, 2010 vide notification no.L-1/12/2010/CERC dated 10-7-2013. The following issues were addressed in the Second Amendments.
 - Renewable energy contracted through competitive bidding;
 - Self-consumption by a seasonal RE generator;
 - Self-consumption by a renewable energy based captive generating plant (CGP)
 - and by a renewable energy generator other than a CGP;
38. In the explanatory memorandum to the draft CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulations, 2010, CERC has analysed the issues relating to the eligibility criteria of renewable energy contracted through competitive bidding, for the benefits under REC mechanism. The relevant portions are quoted hereunder,-

“2.0 Issue regarding treatment of PPA entered through competitive bidding and not through cost plus tariff determined by the regulators

2.1 REC Regulations at present do not allow issuance of Certificates to a renewable energy generator selling power at preferential tariffs. The term “preferential Tariff” has been defined in the REC Regulations as “the tariff fixed by the Appropriate Commission for sale of energy, from a generating station using renewable energy sources, to a distribution licensee”. This definition is stated to leave out the tariff adopted by the Appropriate Commission under section 63 of the Act. Consequently, this is stated to cause ambiguity in treatment of a renewable energy generator selling power through tariff based competitive bidding at a tariff adopted by the appropriate Commission under section 63 of the Act. The Commission is of the view that any investor while participating under competitive bidding quotes tariff after considering all costs as well as risks involved during the life time of the operation of renewable energy generation project, and offers the green energy in its totality and not the electricity component and

green attribute separately. Moreover, the distribution utility procures such renewable energy under competitive bidding for fulfillment of its renewable purchase obligation. Thus, such renewable energy generators (selected through competitive bidding under section 63 of the Act) cannot be given REC credit, as this would amount to double counting of the green attributes. Accordingly, it is proposed to clarify through suitable amendment in Regulation 5(1) (b) of the REC Regulations and substitute the definition of preferential tariff by the definition of tariff as “tariff determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission”. The proposed amendments are as under:

Amendment of Regulation 2 of Principal Regulations:

Sub-clause (k) of clause (1) of Regulation 2 of the Principal Regulations shall be deleted.

Sub-clause (b) of clause (1) of Regulation 5 of Principal Regulations shall be substituted as under:

"(b) it does not have any power purchase agreement for the capacity related to

such generation to sell electricity at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission:"

39. Accordingly, the CERC has amended Regulation 5 of the REC Regulations, 2010 vide CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulations, 2010. The amendments introduced as per the said regulations are quoted hereunder,-

"(1) Sub-clause (b) of clause (1) of Regulation 5 of the Principal Regulations shall be substituted as under:

"(b) it does not have any power purchase agreement for the capacity related to such generation to sell electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission:

Provided that in case of renewable energy sources based co-generation plants, the connected load capacity as assessed or sanctioned by the concerned distribution licensee, shall be considered as the capacity for captive consumption for the purpose of issue of certificates, irrespective of the capacity of such plants covered under the power purchase agreement."

(2) In sub-clause (c) of clause (1) of Regulation 5 of the Principal Regulations, the words "at price not exceeding the pooled cost of the power purchase of such distribution licensee" shall be substituted with the words "at the pooled cost of power purchase of such distribution licensee as determined by the Appropriate Commission".

(3) The provisos under sub-clause (c) of clause (1) of Regulation 5 shall be substituted as under:

"Provided that such a generating company having entered into a power purchase agreement for sale of electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission shall not, in case of pre-mature termination of the agreement, be eligible for participating in the Renewable Energy Certificate (REC) scheme for a period of three years from the date of termination of such agreement or till the scheduled date of expiry of power purchase agreement whichever is earlier ,if any order or ruling is found to have been passed by an Appropriate Commission or a competent court against the generating company for material breach of the terms and conditions of the said power purchase agreement:

Provided further that a Captive Generating Plant (CGP) based on renewable energy sources shall be eligible for the entire energy generated from such plant for self consumption for participating in the REC scheme subject to the condition that such CGP has not availed or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges and/or banking facility benefit:

Provided also that if such a CGP forgoes on its own, the benefits of concessional transmission or wheeling charges and/or banking facility benefit, it shall become eligible for participating in the REC scheme only after a period of three years has elapsed from the date of forgoing such benefits:

Provided also that the above mentioned condition for CGP for participating in the REC scheme shall not apply if the benefits given to such CGP in the form of concessional transmission or wheeling charges and/or banking facility benefit are withdrawn by the concerned State Electricity Regulatory Commission and/or the State Government:

Provided also that any renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005 and availing the concessional benefits in the form of transmission or wheeling charges and/or the banking facility benefit shall be required to

forego such benefits for the purpose of availing renewable energy certificate for self-consumption of energy generated:

Provided also that if any dispute arises as to whether a CGP or any other renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Appropriate Commission for decision.

Explanation:- For the purpose of this Regulation, the expression ‘banking facility benefit’ shall mean only such banking facility whereby the CGP or any other renewable energy generator gets the benefit of utilizing the banked energy at any time (including peak hours) even when it has injected into grid during off-peak hours.”

(4) A new sub-clause shall be added under clause (1) of Regulation 5 of the Principal Regulations as under:

"(d) It does not sell electricity generated from the plant, either directly or through trader, to an obligated entity for compliance of the renewable purchase obligation by such entity."

40. Thus the second amendment clearly specifies that, the investor while participating under competitive bidding quotes tariff after considering all costs as well as risks involved during the life time of the operation of renewable energy generation project, and offers the green energy in its totality and, not the electricity component and green attribute separately. Hence they are not eligible for REC mechanism. The legal position evolved after the second amendment of the REC Regulations, 2010 is as summarized below,-
- (i) After the enactment of REC mechanism, the Distribution utilities can bid under section-63 of the EA-2003 for procuring electricity from RE generator.
 - (ii) While participating in the bidding process, the generator bids the tariff duly considering all costs as well as risks involved in the project.
 - (iii) Before the enactment of the REC regulation in 2010, there was no mechanism to separate the electricity component and the REC component. Hence the generator must have quoted the tariff considering the entire cost of the project and such tariff is inclusive of electricity component and REC component.
 - (iv) The distribution licensees which have been purchasing the electricity from the RE generator at the rate derived through the bidding process, have been paying for the REC component also to the RE generator.
 - (v) Since the cost of purchase is pass through in tariff, the amount paid as cost of renewable energy by the distribution licensees ultimately falls on the consumers of the State.

- (vi) If REC is allowed to the RE generator who participated in the bidding process before the enactment of the REC regulation, 2010 there will be double recovery of the 'REC component' i.e., from (1) The distribution licensees and (2) through REC mechanism and both will ultimately be passed on to the electricity consumers.
 - (vii) Considering the above, CERC has clarified that, the RE generator supplying power to the distribution licensees at the tariff adopted under Section 63 of the Electricity Act-2003 is not eligible to participate in REC scheme.
41. The CERC has thereafter issued the third amendment to the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 which included the 'Distribution licensees' also eligible for participating under the REC mechanism who has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act , in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher. This clearly states that a distribution licensee procuring RE under section 62 or section 63 can account such power under its RPO. Consequently accounting the generation from such RE under the RPO of the distribution licensee will not make the RE generator eligible for REC mechanism as per the CERC(Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010. The relevant provisions in the regulations are quoted hereunder,-

"1. Amendment of Regulation 5 of Principal Regulations:

"1. A new clause (1A) shall be added after clause (1) of Regulation 5 of the Principal Regulations as under:

(1A) A distribution licensee shall be eligible to apply for registration with the Central Agency for issuance of and dealing in Certificates if it fulfills the following conditions:

(a) It has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher:

Provided that the renewable purchase obligation as may be specified for a year, by the Appropriate Commission should not be lower than that for the previous financial year.

Provided further that any shortfall in procurement against the non-solar or solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, shall be adjusted first and only the remaining additional procurement beyond the threshold renewable purchase obligation – being that specified by the Appropriate Commission or in the National Action Plan Climate Change or in the Tariff Policy, whichever is higher - shall be considered for issuance of RECs to the distribution licensees.

b) It has obtained a certification from the Appropriate Commission, towards procurement of renewable energy as provided in sub - clause (a) of this regulation.”

42. From the provisions of the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and its amendments, it can be found that,
- (1) Renewable Energy Certificate (REC) mechanism is a market based instrument to promote renewable energy and facilitate renewable purchase obligations (RPO).
 - (2) RE generators will have two options i) either to sell the renewable energy at preferential tariff or ii) to sell electricity generation and environmental attributes associated with RE generations separately.
 - (3) The environmental attributes can be exchanged in the form of Renewable Energy Certificates (REC).
 - (4) RE generations with existing PPAs are not eligible for REC mechanism.
 - (5) The RE generators recognised or approved by Ministry of New and Renewable Energy for their Renewable Energy Power Projects are eligible for REC mechanism in accordance with the provisions stipulated under the REC Regulations, 2010 and its amendments only on or after 01.04.2010, subject to the fulfilment of the eligibility conditions for participating in REC mechanism as specified in the regulations.
 - (6) Only those RE generators which have not entered into long term power purchase agreement will be eligible for the benefits under REC scheme.
 - (7) REC Regulations, 2010 and its amendments do not contain any provision, which directly or indirectly encourages breach of existing power purchase agreements. The power purchase agreements entered into between RE generators and distribution companies before the issuance of REC regulations by the CERC, were with mutual consent of both the parties based on the terms and conditions prevailing at the time of execution of agreement and such agreement have to be honoured

- unless both the parties mutually agrees to terminate the power purchase agreements.
- (8) In the case of premature termination of power purchase agreement by way of generators default, the RE generator is not eligible to participate in the REC scheme for a period of three years from the date of termination of such agreement.
 - (9) Any investor while participating under competitive bidding quotes tariff after considering all costs as well as risks involved during the life time of the operation of renewable energy generation project, and offers the renewable energy at a tariff considering all costs and risks of the project and not the electricity component and REC component separately. Moreover, the distribution licensee procures such renewable energy under competitive bidding for fulfilment of its renewable purchase obligation. Thus, such renewable energy generators, selected through competitive bidding under section 63 of the Act, cannot be given any benefit under REC scheme, as this would amount to double counting of the environmental attributes.
 - (10) RE generators, who have not entered into power purchase agreements before 01.04.2010 and who have not entered into power purchase agreements at preferential tariff fixed by the Commission, are allowed to sell the electricity components separately and avail the environmental attributes through REC scheme.
 - (11) The distribution licensees are also eligible for REC, if it had procured renewable energy in the previous year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the RPO as specified by the appropriate Commission.
 - (12) A distribution licensee procuring renewable energy at the tariff fixed under Section 62 or approved under Section 63 can account such power towards its RPO, since the distribution licensee is paying the cost of REC component also to the RE generator and such RE generators are not eligible to claim any benefit under the REC scheme in respect of the renewable energy so sold to the distribution licensee.
43. From the scheme for development and consumption of renewable energy in the Country, as laid down in the Electricity Act, 2003, and the regulations made thereunder, it can easily be found that the whole process has to be conceived in a global perspective and implemented in a national perspective. It is well known that renewable energy is comparatively costlier. Naturally, the failure of the distribution licensee or any obligated entity to comply with its RPO may give it some

immediate short term financial benefit, by way of reduced average cost of power purchase and consequent reduced tariff to the consumers. But in the long term perspective, such an approach will be highly detrimental to the national interest, sustainable development processes, welfare of society and to the conservation of nature and natural resources. Taking these aspects into consideration, the distribution licensee and other obligated entities, the RE generators as well as the consumers should cooperate to promote the generation and consumption of renewable energy. ‘Think globally and act locally’ – the famous axiom for the conservation of nature and natural resources, is squarely applicable in the case of implementation of the legal provisions relating to renewable energy as well. Government of India and the State Governments have introduced many incentive schemes such as capital subsidy, soft loans, accelerated depreciation, tax concession and duty concession to promote generation and consumption of renewable energy. Similarly the regulations also provide for incentives such as preferential tariff, banking facility, concessional transmission charges and concessional wheeling charges. The scheme of renewable energy certificate has been introduced to ensure maximum generation of electricity by harnessing the renewable energy sources by incentivizing the renewable energy generators. Sufficient safeguards have also been incorporated in the regulations to prevent misuse of such incentive schemes.

44. The claims of the petitioner have to be examined in the light of the above legal frame work. The petitioner claims that he is eligible for REC as per the provisions in the Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (hereinafter referred to as REC Regulations, 2010). According to Regulation 5 of the REC Regulations, 2010 a generating company engaged in generation of electricity from renewable energy source shall be eligible to apply for registration for issuance of and dealing in REC only if;
 - (i) It has obtained accreditation from the State Agency designated by the Commission,
 - (ii) It does not have any power purchase agreement for the sale of electricity generated from renewable sources at a preferential tariff determined by the appropriate commission,
 - (iii) It sells the electricity generated from renewable energy sources either to the distribution licensee of the area in which the eligible entity is located at a price not exceeding the pooled cost of power purchase of the distribution licensee or to any other licensee or to an open access consumer at a mutually agreed price or through power exchange at market determined price.

- (iv) It does not sell electricity generated from renewable energy sources to an obligated entity for the compliance of renewable purchase obligation of such entity.
45. According to the petitioner, the petitioner is not selling power to KSEB Ltd at preferential tariff but at a tariff adopted by the Commission after competitive bidding. As per Article 5(1)(b) of the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as clarified by the Second Amendment, dated 10-07-2013, for a generating company to be registered under REC mechanism, it should not have a PPA specifically designed to sell electricity to the obligated entity for purpose of meeting its Renewable Purchase Obligation. Further contention of the petitioner is that the PPA was executed between the petitioner and KSEBL on 04-07-2006, when KSERC (Renewable Purchase Obligation and Its Compliance) Regulations, 2010, requiring KSEBL to meet RPO, was not even in existence.
46. On examination of the entire facts and circumstances of the case it can be seen that the following facts have been admitted by both the petitioner as well as by the respondent.
- (i) The KSERC (Power Procurement from Renewable Sources by Distribution Licensee) Regulations, 2006 was notified on 24.06.2006 and as per the provisions in Regulation 3 it has been stipulated as follows,-
“Each Distribution Licensee shall purchase a quantum of 5% from renewable sources expressed as a percentage of its total consumption during the year. The breakup of 5% shall be 2% from SHP, 2% from wind and 1% from all other sources except Small Hydro and Wind mentioned in 2(f) respectively.”
 - (ii) The Iruttukanam Small Hydro Project was allotted to the petitioner as per G.O (MS) No. 16/04/PD dated 21.06.2014 in accordance with the guidelines issued by the State Government vide G.O (MS) 2/2003/PD dated 16.01.2003 for developing small hydro projects under independent power producer (IPP) scheme.
 - (iii) Implementation agreement for the said SHP was executed between the State Government and the petitioner on 20.12.2004.
 - (iv) The PPA between the petitioner and the respondent was executed on 04.07.2006 which is subsequent to the notification of KSERC (Power Procurement from Renewable Sources by Distribution Licensee) Regulations, 2006, dated 24.06.2006.
47. Hence the procurement of electricity by KSEB Ltd from the petitioner was to meet the RPO as specified in the KSERC (Power Procurement from Renewable Sources by Distribution Licensee) Regulations, 2006. The petitioner was allotted the above project under bid route and the price of electricity was at the rate quoted by him. When the bid was invited by the Government and when the petitioner had quoted the rate of electricity, the REC scheme was not in existence. The petitioner

must have quoted the rate taking into consideration all his expenses and reasonable return. The concept of dividing the cost of renewable energy into the two components namely, cost of electricity and cost of environmental benefits, was introduced only through the REC mechanism. The regulations for implementing the REC mechanism was introduced only as per the REC Regulations, 2010. Therefore by any stretch of imagination, the petitioner cannot claim that the rate for electricity generated from Iruttukanam SHP, quoted by him several years before the introduction of REC scheme, was only for the electricity component and that he is eligible for the benefits of environmental component as per the REC scheme. In this regard the analysis and decision of CERC as quoted in para 33 of this order is highly pertinent. As such, only new renewable energy projects commissioned after notification of the KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010, can choose to sell electricity component and renewable energy component separately. The SHP of the petitioner is a renewable power project specifically established to supply renewable energy to KSEB Ltd and therefore the petitioner cannot claim any benefits under the REC scheme introduced as per REC Regulations, 2010. It can also be seen that the electricity generated from the Iruttukanam SHP of the petitioner is being sold to an obligated entity namely, KSEB Ltd, for compliance of its renewable purchase obligation. The rate of energy in the PPA is inclusive of all the components. Further the second proviso to Regulation 3 in KSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010, clarifies as follows,-

“Provided further, such obligation to purchase renewable energy shall be inclusive of the purchases if any from renewable sources already being made by the concerned obligated entity.”

Therefore it is found that the power purchased by KSEB Ltd from the SHP of the petitioner can be legitimately accounted towards the fulfilment of RPO of KSEB Ltd. Accordingly, the electricity purchased by KSEBL from the petitioner was rightly adjusted by the Commission towards KSEB's RPO. Regulation 5 of the REC Regulations, 2010, as amended makes it amply clear that a generator will not be eligible for registration under REC mechanism, if it is selling the electricity generated from renewable sources to any obligated entity for the purpose of fulfilment its RPO. In the present case, the petitioner has been selling the electricity from Iruttukanam SHP to KSEB Ltd for fulfillment of the RPO of KSEB Ltd as per PPA dated 04.07.2006. Only the Renewable Energy Projects which commenced operation after the Central Electricity Regulatory Commission (Terms and conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, will have the option of selling the renewable energy at the Preferential Tariff or selling the electricity component and the environmental component (represented by the Renewable Energy Certificates) separately. The renewable energy projects which supplies electricity at preferential tariff shall have to continue with the same tariff until the validity of

Power Purchase Agreement ceases and such projects cannot terminate such PPA for availing the benefit of REC. The SHP of the petitioner was already operational and the PPA with KSEB Ltd was already in force prior to the notification of REC Regulations, 2010. In view of the facts and legal provisions explained above it can easily be found that there is absolutely no merit in the contentions or claims of the petitioner and that the petitioner is not eligible to get registration under REC mechanism for the electricity supplied by him from Iruttukanam SHP to KSEB Ltd.. Consequently, the prayers of the petitioner are declined and the petition is dismissed.

Decision

48. In view of the facts and legal provisions explained in previous paragraphs, the following orders are issued,-
- (1) The petitioner is not eligible to get registration under REC mechanism for the electricity supplied by him from Iruttukanam SHP to KSEB Ltd and therefore the decision of ANERT as per its order AO No.48/REC/2015/ANERT dated 24.03.2015 is upheld.
 - (2) M/s KSEB Ltd is entitled to account the renewable energy purchased from the Iruttukanam SHP of the petitioner as per the PPA dated 04.07.2006 towards the RPO of KSEB Ltd.
 - (3) The petition is dismissed.

Dated this 2nd day of September 2015.

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

Approved for Issue

Sd/-
Santhosh Kumar. K.B
SECRETARY