

**CENTRAL ELECTRICITY REGULATORY COMMISSION (CERC)**

**NEW DELHI**

**Petition No. 230 /2010 (Suo Motu)**

**Date: 10<sup>th</sup> August, 2010**

**Coram:**

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri S.Jayaraman, Member**
- 3. Shri V.S.Verma, Member**
- 4. Shri M Deena Dayalan, Member**

**IN THE MATTER OF**

Determination of Fee and Charges payable under Regulation 11 of the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010.

**ORDER (SUO MOTU)**

- 1.** In exercise of powers conferred under sub-section (1) of Section 178 and Section 66 read with clause (y) of sub-section (2) of Section 178 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission has notified (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (herein after referred to as 'CERC REC Regulations').
- 2.** The Commission vide Order dated January 29, 2010 has designated National Load Despatch Centre (NLDC) to undertake functions of the Central Agency under the CERC RC Regulations.
- 3.** The CERC REC Regulations envisage functions of the Central Agency as follows: Registration of Eligible Entities, Issuance of Certificates, Maintaining and Settling Accounts in respect of certificates, Repository of Transactions of Certificates and Such other function incidental to the implementation of Renewable Energy Certificate Mechanism as may be assigned by the Commission.

**4.** Regulation 11 of the CERC REC Regulations empowers the Commission to determine by Order, based on the proposal in this regard from the Central Agency, the fees and charges payable by the Eligible Entities for participation in the scheme for, Registration, Eligibility of Certificates, Issuance of Certificates, and other matters connected therewith.

**5.** The relevant portion of the Regulation is quoted below:

**11. FEES & CHARGES**

*(1) The Commission may from time to time, based on the proposal in this regard from the Central Agency, determine, by order, the fees and charges payable by the eligible entities for participation in the scheme for registration, eligibility of certificates, issuance of certificates and other matters connected therewith.*

*(2) The fees and charges payable under these regulations may include onetime registration fee and charges, annual fee and charges, the transaction fee and charges for issue of certificate and charges for dealing in the certificate in accordance with these regulations, as the Commission may consider appropriate.*

*(3) The fees and charges paid by the eligible entities shall be collected by the Central Agency and utilised for the purpose of meeting the cost and expense towards the remuneration payable to the compliance auditors, the officers, employees, consultants and representatives engaged to perform the functions under these regulations.*

**6.** In accordance with the above Regulation, the fee and charges payable by the Eligible Entities to participate in the REC Mechanism include:

- (a) One-time Registration fee and charges,
- (b) Annual fee and charges,
- (c) Transaction fee and charges for issue of certificate and
- (d) Charges for dealing in the certificate

**7.** The Commission proposes to determine the above fees and charges as per the proposal enclosed as Annexure 1.

**8.** Comments /suggestions of the stakeholders on the above proposal are invited by 31.8.2010. We direct that the matter be notified for hearing on 07.09.2010 before taking a final decision regarding the fee and charges payable by the entities participating in the REC Mechanism.

Sd/-

[M DEENA DAYALAN]

MEMBER

Sd/-

[V.S.VERMA]

MEMBER

Sd/-

[S. JAYARAMAN]

MEMBER

Sd/-

[Dr. PRAMOD DEO]

CHAIRPERSON

## **Annexure-1**

### **Proposed fees and charges payable by the Eligible Entities to participate in the REC Mechanism**

**1.1.** REC Regulation specifies REC framework to be operated at national level. This framework envisages first accreditation of eligible entities by State Agencies and subsequently, registration of eligible entities with Central Agency. The Commission has already approved detailed procedures for Registration of renewable generator, Issuance of REC and Redemption of REC. The Commission has also approved a Model procedure for Accreditation of Renewable Energy Generation project by State Agency. In line with the detailed procedures, the Commission also proposes to lay down fees and charges for Accreditation by eligible entity which shall act as default fees and charges for accreditation till the State Commission notifies such charges for the State Agencies.

**1.2.** The Regulation 11 (2) of the REC Regulations also empowers the Commission to determine Transaction fee and charges for dealing in the certificate. However, the Commission does not intend to exercise this power at this initial stage and gives flexibility, until further orders, to Power Exchange (PX) to determine fee and charges towards the transaction of the renewable energy certificate.

### **2. Cost Estimate for Operationalising the REC Mechanism**

**2.1.** The Commission while estimating the cost for operationalising the REC Mechanism has taken into consideration, Cost towards Capital Items, Operational Cost, and the Manpower Cost.

**2.2.** The Commission has also considered the Capital Grant to be received from the MNRE for hardware, software, consultancy fee, direct manpower costs for initial three years.

**2.3.** For the purpose of determination of Fees & Charges, considering the capital grant to be received from the MNRE as mentioned above, cost of funds towards such capital items is not considered. Only amortisation cost is considered.

**2.4.** The Commission has also assumed that Central Agency and State Agencies shall be utilising their existing infrastructure to a great extent. It is difficult to attribute any charges

associated with utilisation of common infrastructure and facilities by Central Agency and State Agencies. However, some capital charge towards utilisation of Assets/infrastructure and common facilities have been considered while estimating overall cost of operationalising REC mechanism.

**2.5.** Accordingly, amortisation of software cost over 3 years and hardware related costs over 5 years have been considered. As regards amortisation of other infrastructure costs, amortisation over 10 year period has been considered. The basis for estimation of other Infrastructure Costs has been considered as 20% of Gross Fixed Assets of NLDC.

**2.6.** Operating Expenses shall include manpower related expense at Central Agency and State Agency, administrative and general expenses, and up-gradation and asset related Repairs & Maintenance expense. As proposed by NLDC, five (5) executive with average remuneration of Rs. 15 Lakh per annum per executive has been considered for three years for estimation of manpower related expense at Central Agency. For State Agency, one (1) executive with average remuneration of Rs. 5 Lakh per annum per executive has been considered for three years for estimation of manpower related expense at State Agency. Also it has been assumed that 10 State Agencies will be in place in first year and total of 20 State Agencies will be there in the second and third year.

**2.7.** It is estimated that the capital charge related expenses and operating expense for the operationalisation of REC mechanism through Central Agency and State Agencies would range from Rs. 204.42 Lakh (yr-1), Rs. 321.60 Lakh (yr-2) and Rs. 329.90 Lakh (yr-3).

### **3. APPROACH FOR DETERMINATION OF FEE AND CHARGES**

**3.1.** The National Action Plan on Climate Change (NAPCC) has envisaged the dynamic minimum renewable purchase specification (DMRPS) to be 5% during FY 2009-10 which shall be increased by 1% every year for subsequent 10 years. In order to meet the target as envisaged by the NAPCC, it is assumed that approximately 4000 MW per annum of renewable energy capacity should be installed in subsequent years.

**3.2.** Taking the aforesaid fact into consideration three scenarios i.e. optimistic, pessimistic and realistic scenarios have been analysed by the Commission. The summary of the analysis has been presented in the table below.

**Table 3: Summary of Expected Projects Participating in the REC Mechanism**

Target RE Capacity Addition in 2010-11	MW	4000	4000	4000
Scenario		Optimistic	Pessimistic	Realistic
Likely RE Capacity to Participate in REC	%	25%	10%	15%
Likely RE Capacity to Participate in REC	MW	1000	400	600
Wind Share (70%)	MW	700	280	420
Biomass Share (10%)	MW	100	40	60
Cogeneration Share (10%)	MW	100	40	60
SHP Share (10%)	MW	100	40	60
Wind Projects (Project Size 5 MW)	No.	140	56	84
Biomass Projects (Project Size 10 MW)	No.	10	4	6
Cogeneration Projects (Project Size 15 MW)	No.	7	3	4
SHP Projects (Project Size 5 MW)	No.	20	8	12
<b>Likely Projects Participating in REC Mechanism</b>	<b>No.</b>	<b>177</b>	<b>71</b>	<b>106</b>

**3.3.** Further, in order to assess the likely RECs available under the three scenarios discussed above, the Commission has given due consideration to the performance factors and track record for the development of individual renewable energy technology in the country. The table below summarises the likely RECs available under different scenarios;

**Table 4: Summary of expected REC available under different scenario**

Likely Capacity Addition in 2010-11	MW	4000	4000	4000
Scenario	Unit	Optimistic	Pessimistic	Realistic
Likely Capacity to Participate in REC	%	25%	10%	15%
<b>Likely REC available under the three scenario</b>				
Wind Projects (CUF - 23.72%)	MWh	1454587	581835	872752
Biomass Projects (PLF - 80%)	MWh	700800	280320	420480
Cogeneration Projects (PLF - 52.67%)	MWh	461360	184544	276816

SHP Projects (CUF - 41.25%)	MWh	361350	144540	216810
<b>Total REC available under different Scenario</b>	<b>MWh</b>	<b>2978097</b>	<b>1191239</b>	<b>1786858</b>

**3.4.** The Commission has considered the expenses of the Central Agency and State Agencies as well as likely REC available under the three scenarios. The Commission is of the view that the fee and charges should be sufficient enough so that various agencies envisaged for implementation of REC Mechanism may discharge their function in an impartial and transparent manner. Further the fee and charges payable by the entities should not be so high as to discourage the investors from participating in the REC Mechanism.

**3.5.** The Commission has also taken into consideration the per unit impact of fee and charges payable by the entities participating into the REC Mechanism.

#### **4. REGISTRATION OF RE GENERATING COMPANY AS ELIGIBLE ENTITY FOR RECEIVING THE RENEWABLE ENERGY CERTIFICATE**

##### **Applicable Fee and Charges towards Registration**

**4.1.** Procedures for Registration of Renewable Energy Generation Project by Central Agency (hereinafter “Procedure”) have been approved by the Commission vide its Order dated 1st June 2010. Clause 8 of the said procedure prescribes the fees and charges to be levied towards processing of application and for undertaking registration. The said clause is reproduced as under:

##### **“8. FEES AND CHARGES**

*The fees and charges towards processing of application and undertaking registration shall be as mentioned below,*

- One time Registration Processing Fees: Rs.\_\_\_\_\_/- per application shall be payable at the time of submitting application for registration to Central Agency.
- One time Registration Charges: Rs.\_\_\_\_\_/- per application shall be payable upon grant of registration.

- *Annual Charges for Registration: Rs.\_\_\_\_\_/- per annum per application shall be payable by April 10, for each fiscal year (or each anniversary date for date of initial registration).*

- *Registration Charges for Revalidation/extension of validity:*

*Rs.\_\_\_\_\_/- per application shall be payable at the time of revalidation/ extension of validity of existing registration at the end of five years....."*

**4.2.** The Commission hereby specifies the following fees and charges for Registration in accordance with Clause 8 of the Procedure:

**4.2.1.** An application for Registration of Renewable Energy (RE) Generating Company as 'Eligible Entity' for its RE Generation Projects shall be made to the Central Agency. The application for Registration of RE Generating Company as 'Eligible Entity' shall be accompanied by a non-refundable 'One-time Application Processing Fees' at the rate of Rs. 1000/- per application.

**4.2.2.** The Eligible Entity shall pay the 'One-time Registration Charge' at the rate of Rs.5000/- per application once the registration is granted by the Central Agency.

**4.2.3.** The Eligible Entity shall also pay an 'Annual Charge' at the rate of Rs. 1000/- per application. The 'Annual Charges' shall be payable by April 10, of each year or each anniversary date from date of initial registration.

**4.2.4.** The Eligible Entity shall pay charges towards Revalidation/Extension of Validity at the rate of Rs. 5000/- per application at the time of revalidation/extension of validity of existing registration at the end of five (5) years, or any such period as determined by the Commission from time to time, from the date of initial registration unless otherwise revoked prior to such validity period.

**4.2.5.** The fee and charges payable by the Eligible Entity for Registration Eligible Entity for receiving the Renewable Energy Certificates and expected revenue are elaborated in the table below;

**Table 5: Summary of Fee and Charges towards Registration**

Scenario	Unit	Optimistic	Pessimistic	Realistic
Likely Capacity to Participate in REC	%	25%	10%	15%
<b>Total No. of Projects Participating in REC Mechanism</b>	No.	177	71	106
Processing Fees (One Time)	Rs	1000	1000	1000
Registration Charges (One Time)	Rs	5000	5000	5000
Annual Charges	Rs	1000	1000	1000
<b>Registration Fees</b>	Rs	<b>7000</b>	<b>7000</b>	<b>7000</b>
<b>Expected Revenue Realisation</b>	Rs Lakh	<b>12.39</b>	<b>4.97</b>	<b>7.42</b>
<b>Per unit Impact of Registration Fee</b>	Paisa/kWh	<b>0.0416</b>	<b>0.0417</b>	<b>0.0415</b>

**4.2.6.** The taxes and duties on fee and charges shall be applicable as per prevailing norms.

#### **4.3. Accounting of Registration Fee and Charges**

**4.3.1.** The Central Agency shall maintain a separate bank account called 'Registration Fee & Charge Account' wherein all money received on account of Registration of RE Generator as Eligible Entity with the Central Agency shall be credited.

**4.3.2.** The Statement of Applicable Fee and Charges shall be issued by Central Agency to the Eligible Entity, by April 1 of every year or on each anniversary date from the date of initial registration.

**4.3.3.** The Statement of Applicable Revalidation Charge shall be issued by the Central Agency at the end of five years from the date of initial Registration.

**4.3.4.** The Applicable Fee and Charges shall be payable by the Eligible Entity within Ten (10) days from the issue of Statement by the Central Agency. In case the payment is delayed beyond two days from the due date, the Eligible Entity responsible for the delay shall be liable to pay interest at the rate of 0.04% per day.

#### **4.4. Collection and Utilisation of Funds from Registration of RE Generation Project**

**4.4.1.** The fee and charges towards Registration of RE Generation Project shall be collected by the Central Agency.

**4.4.2.** The fee and charges paid by the Eligible Entities shall be collected by the Central Agency and utilised for the purpose of meeting the cost and expense towards the remuneration payable to the Compliance Auditors, officers, employees, consultants and representatives engaged to perform the functions under the CERC REC Regulations.

### **5. ISSUANCE OF RENEWABLE ENERGY CERTIFICATE TO THE ELIGIBLE ENTITY**

#### **5.1. Applicable Fee and Charges for Issuance of Renewable Energy Certificate**

Procedures for Issuance of Renewable Energy Certificate to the eligible entity by Central Agency, as approved by the Commission vide its Order dated 1<sup>st</sup> June 2010. Clause No. 8 of the said procedure prescribes the fees and charges towards processing of application and issuing RE certificate. The said clause is reproduced as under:

#### ***"8. FEES AND CHARGES***

*The fees and charges towards processing of application and issuing the RE certificates shall be as mentioned below:*

- Application Processing Fees: Rs.\_\_\_\_\_/- shall be payable at the time of submitting application for issuance of RECs to Central Agency.*

*All fees and charges shall be payable by way of Demand Draft or through Electronic Clearing System drawn in favour of \_\_\_\_\_(Name of Central Agency) payable at New Delhi."*

**5.2.** Considering the above, the Commission specifies fees and charges for Issuance of Renewable Energy Certificate as under:

**5.2.1.** An application for Issuance of Certificates shall be made by the Eligible Entity to the Central Agency. The application for issuance of Renewable Energy Certificate shall be accompanied by a fee payable at the rate of Rs.10 per Certificate only.

**5.2.2.** The per unit impact of the fee payable by the Eligible Entity for Issuance of the Renewable Energy Certificates is elaborated in the table below;

**Table 6: Summary of Fee and Charges towards Issuance of REC**

Likely Capacity Addition in 2010-11	MW	4000	4000	4000
Scenario	Unit	Optimistic	Pessimistic	Realistic
Likely Capacity to Participate in REC	%	25%	10%	15%
Fees per Certificate	Rs	10	10	10
<b>Expected REC Available</b>	<b>No.</b>	<b>2978097</b>	<b>1191239</b>	<b>1786858</b>
<b>Expected Revenue Realisation</b>	<b>Rs. Lakh</b>	<b>297.81</b>	<b>119.12</b>	<b>178.69</b>
<b>Per unit Impact of Fee towards Issuance of REC</b>	<b>Paisa/kWh</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>

**5.2.3.** The taxes and duties on fee and charges shall be applicable as per prevailing norms.

### **5.3. Accounting of Fee and Charges collected towards Issuance of REC**

**5.3.1.** The Central Agency shall maintain a separate bank account called '**Issuance Fee & Charge Account**' wherein all the money received on account of Issuance of REC to the Eligible Entity shall be credited.

#### **5.4. Collection and Utilisation of Funds from Issuance of REC**

**5.4.1.** The fee and charges paid by the Eligible Entities towards Issuance of REC shall be collected by the Central Agency.

**5.4.2.** The fee and charges paid by the Eligible Entities towards Issuance of REC shall be utilised for the purpose of meeting the cost and expense towards the remuneration payable to the Compliance Auditors, officers, employees, consultants and representatives engaged to perform the functions under the CERC REC Regulations.

#### **6. ACCREDITATION OF RE GENERATION PROJECT BY STATE AGENCY**

##### **Guidelines for Fee and Charges towards Accreditation of RE Generation Project**

**6.1.** Clause 8 of the Model Procedure/Guidelines for Accreditation of Renewable Energy Generation Project by State Agency, stipulates the fees and charges towards Accreditation of RE Generation project. The said clause is reproduced as under:

##### **"8. FEES AND CHARGES**

*The fees and charges<sup>2</sup> towards processing of application and undertaking accreditation shall be as mentioned below,*

- *One time Application Processing Fees: Rs.\_\_\_\_\_/- per application shall be payable at the time of submitting application for accreditation to State Agency.*
- *One time Accreditation Charges: Rs.\_\_\_\_\_/- per application shall be payable to the State Agency upon grant of accreditation.*
- *Annual Charges for Accreditation: Rs.\_\_\_\_\_/- per annum per application shall be payable by April 10, for each fiscal year (or each anniversary date for date of initial accreditation).*
- *Accreditation Charges for Revalidation/extension of validity: Rs.\_\_\_\_\_/- per application shall be payable at the time of revalidation/ extension of validity of existing accreditation at the end of five years.*

*All fees and charges shall be payable by way of Demand Draft or through Electronic Clearing System drawn in favour of \_\_\_\_\_ (Name of State Agency) payable at \_\_\_\_\_ (location).*

*<sup>2</sup>The Fees and Charges should be as per the Model Guidelines to be notified by the Central Electricity Regulatory Commission from time to time.*

**6.2.** Considering the same, the Commission determines the fees and charges for accreditation of RE project(s) which will apply till such fees and charges are specified by State Commissions for the State Agency:

**6.2.1.** An application for Accreditation of RE Generation Projects shall be made to the State Agency by the Renewable Energy (RE) Generating Company. The application for Accreditation of RE Generation Projects shall be accompanied by a non-refundable ‘One - time Application Processing Fees’ at the rate of Rs.5000/- per application.

**6.2.2.** The Eligible Entity shall pay the ‘One-time Accreditation Charge’ at the rate of Rs.30000/- per application once the ‘Certificate of Accreditation’ is granted by the State Agency.

**6.2.3.** The Eligible Entity shall also pay an ‘Annual Charge’ at the rate of Rs.10000/- per application. The ‘Annual Charges’ shall be payable by April 10, of each fiscal year or each anniversary date from date of initial Accreditation.

**6.2.4.** The Eligible Entity shall pay charges towards Revalidation/Extension of Validity at the rate of Rs.15000/- per application at the time of revalidation/extension of validity of existing Accreditation at the end of five (5) years, or any such period as determined by the Commission from time to time, from the date of initial Accreditation unless otherwise revoked prior to such validity period.

**6.2.5.** The per unit impact of the fee and charges payable by the Eligible Entity and expected revenue realisation from Accreditation of its RE Generation Projects is elaborated in the table below;

**Table 7: Summary of Fee and Charges towards Accreditation**

Scenario	Unit	Optimistic	Pessimistic	Realistic
Likely Capacity to Participate in REC	%	25%	10%	15%
<b>Total No. of Projects Participating in REC Mechanism</b>	No.	<b>177</b>	<b>71</b>	<b>106</b>
Processing Fees (One Time)	Rs	5000	5000	5000
Accreditation Charges (One Time)	Rs	30000	30000	30000
Annual Charges	Rs	10000	10000	10000
<b>Accreditation Fees</b>	<b>Rs</b>	<b>45000</b>	<b>45000</b>	<b>45000</b>
<b>Expected Revenue Realisation</b>	<b>Rs Lakh</b>	<b>79.65</b>	<b>31.95</b>	<b>47.70</b>
<b>Per unit Impact of Accreditation Fee</b>	<b>Paisa/kWh</b>	<b>0.267</b>	<b>0.268</b>	<b>0.267</b>

**6.2.6.** The taxes and duties on fee and charges shall be applicable as per prevailing norms.

### **6.3. Accounting of Accreditation Fee and Charges**

**6.3.1.** The State Agency may maintain a separate bank account called '**Accreditation Fee & Charge Account**' wherein all the money received on account of Accreditation of RE Generation Projects by the State Agency shall be credited.

**6.3.2.** The Statement of Applicable Fee and Charges may be issued by State Agency to the Eligible Entity towards accrediting its Generation Projects, by April 1 of every year or on each anniversary date from the date of initial Accreditation.

**6.3.3.** The Statement of Applicable Revalidation Charge may be issued by the State Agency at the end of five years from the date of initial Accreditation.

**6.3.4.** The Applicable Fee and Charges may be payable by the Eligible Entity within Ten (10) days from the issue of Statement by the State Agency. In case the payment is delayed beyond two days from the due date, the Eligible Entity responsible for the delay shall be liable to pay interest at the rate of 0.04% per day.

#### **6.4. Collection and Utilisation of Funds from Accreditation of RE Generation Project**

**6.4.1.** The fee and charges towards Accreditation of RE Generation Project shall be collected by the State Agency.

**6.4.2.** The fee and charges paid by the Eligible Entity towards Accreditation of its Generation Projects shall be utilised for the purpose of meeting the cost and expense towards the remuneration payable to the State Agency, officers, employees, consultants and representatives engaged to perform the functions under the framework developed by the Central Commission and the concerned State Electricity Regulatory Commission for implementation of REC Mechanism.

#### **7. Estimate of Revenue from operationalising REC Mechanism**

**7.1.** The Commission has anticipated that during first year, at least 10% of the likely capacity addition in renewable energy segment shall participate in the REC Mechanism. Subsequently, it is expected that 15% of likely capacity addition in renewable energy segment shall participate in second and third year. Accordingly, the likely revenue from Accreditation of RE project, Registration of Eligible Entity and Issuance of REC has been analysed. The table below presents the likely revenue expected from the participation of RE generators in the REC Mechanism.

**Table 8: Estimation of Revenue from Operationalising REC Mechanism**

<b>Source of Revenue</b>	<b>Estimation of Revenue per annum Rs. Lakh</b>		
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Likely Capacity to Participate in REC in %	10%	15%	15%
Total No. of Projects Participating in REC Mechanism	71	106	106
<b>Central Agency</b>			
Registration of RE Generating Company	4.97	8.13	9.19
Issuance of REC	119.12	297.81	476.50
Total revenue to Central Agency	124.09	305.94	485.69
<b>State Agencies</b>			
Revenue from Accreditation of RE Projects	31.95	54.8	65.4
Total revenue of Central Agency and State Agencies	156.04	360.74	551.09

**7.2.** The Commission while determining these fee and charges has taken into account capital grant from MNRE for implementation of REC framework. The gap between the revenue and expenses of the State Agencies during the first three years is expected to be bridged by the grant from MNRE. It is to be noted that RE developers generally require certification / registration of State Agencies before setting up their projects. The State Agencies collects certification / registration charges from all the renewable energy projects coming in the States. The Accreditation charges recommended herein are in addition to the charges already being collected by the State Agencies. This revenue source has also been taken note of while recommending Accreditation Charges for State Agencies.

## **8. Applicability of the Order**

**8.1.** The fee and charges determined through this order shall be payable by the eligible entities participating in the REC Mechanism.

**8.2.** The Control Period or Review Period of the fee and charges determined through this Order shall be of three years of which the first year shall be the period from the date of publishing of this Order to March 31, 2011.

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