



## **FORUM OF REGULATORS (FOR)**

### **TERMS OF REFERENCE**

#### **A Study on “Preparing incentive structure for States for fulfilling Renewable Purchase Obligation (RPO) targets”**

##### **1.0 Introduction:**

**1.1** The Forum of Regulators (FOR) has been constituted by the Government of India in terms of Section 166 (2) of the Electricity Act, 2003. The Forum consists of Chairperson of the Central Commission and the Chairpersons of the State Commissions. Chairperson of the Central Commission is the Chairperson of the Forum of Regulators and secretarial assistance to the Forum is provided by the Central Commission. The Forum is responsible for harmonization, coordination and ensuring uniformity of approach amongst the Electricity Regulatory Commissions across the country, in order to achieve greater regulatory certainty in the electricity sector.

**1.2** FOR has been taking steps towards ensuring that the provisions in the Electricity Act and the policies i.e. National Electricity Policy (NEP) and Tariff Policy are well implemented. The responsibility of promoting cogeneration and generation of electricity from renewable sources of energy has been entrusted on the Appropriate Commission in section 61 and in particular to the state commissions under section 86 (1) (e) of the Electricity Act 2003. Pursuant to this provision of the act, the tariff policy stipulates that the Appropriate Commission shall fix minimum percentage of purchase of power from such sources taking into account the availability of renewable resources in the region and its impact on the retail tariff. Accordingly, various State Electricity Regulatory Commissions (SERCs) have specified the Renewable



Energy Purchase Obligations (RPO) for their licensee distribution companies. Specified RPO vary across the states.

- 1.3** In order to accelerate the large-scale deployment of renewable energy, the National Action Plan on Climate Change (NAPCC) envisages dynamic renewable purchase obligation target of 5% at national level for 2010 with annual increase in trajectory over long term so as to reach around 15% RPO target by 2020 at national level. Since the renewable energy resources are concentrated in the certain pocket of the country, in order to meet the requirement of the States which are in deficit of such resources inter-state transmission of renewable energy require to be encourage. One such policy instrument, prescribed in NAPCC, to achieve desired level of penetration of renewable energy is Renewable Energy Certificate (REC) Mechanism which would enable large number of stakeholders to purchase renewable energy in a cost effective manner.
- 1.4** Taking into consideration the recommendation of NAPCC for the promotion of renewable energy, the Ministry of New and Renewable Energy (MNRE) undertook the study to develop 'Conceptual Framework for Proposed REC Mechanism in India'. Subsequently, Central Electricity Regulatory Commission (CERC) and the Forum of Regulators (FOR) have developed detailed design of regulatory framework, operating framework and Institutional arrangement for introduction of REC Mechanism in India.
- 1.5** Subsequently, the Ministry of Power also amended the Para 6.4 (1) of the Tariff Policy which inter alia states that purchase of energy from non-conventional sources of energy should take place more or less in the same proportion in different States and for achieving this objective in the current scenario of large



- availability of such resources only in certain part of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be evolved.
- 1.6** Recently, during March 2011, first REC trade transaction has taken place on the power exchanges which has successfully established the operationalisation of REC mechanism in India.
- 1.7** The concept of REC Mechanism was introduced essentially to encourage the large scale deployment of renewable energy and to facilitate inter-State exchange of RE power irrespective of geographical constraints and to help RE constrained States to accomplish their RPO targets. However, the renewable energy is primarily in-firm in nature renewable energy resources rich states are reluctant to go for higher than a limit of RPO due to the consideration of extra cost to be incurred due to higher preferential tariff, cost of keeping spinning reserve and also associated transmission infrastructure development.
- 2.0** Thirteenth Finance Commission (2010–2015) in its report (December 2009), took the note that it is important to incentivise fiscal policies for promotion of renewable energy projects. Report observes that there are some tax incentives available to private sector entrants for power generation from renewable sources, but no system of incentives in place for states to encourage clean power generation from renewable sources. Considering the same observation, Finance Commission recommended an incentive grant of Rs. 5000 crore for grid-connected renewable energy based on the states' achievement in renewable energy capacity addition from 1 April 2010 to 31 March 2014. This grant to states will reward them for their past actions and incentives their



future actions to increase the share of electricity generated from renewable energy.

3.0 This concept seeks to address the infirm nature of renewable sources particularly for inter-state transaction and mismatch between availability of RE sources and the requirement of the obligated entities to meet their renewable purchase obligation. However, the purchase REC by the States are in deficit provides for transfer of environmental attributes, not electricity which may have impact on the retail tariff of their consumers. Therefore, to encourage States to promote renewable energy generation in their states to achieve NAPCC target of 15% by FY205, an incentive scheme similar to as provided in the 13th Finance Commission report is necessary to encourage the States for higher RPO and procurement of renewable energy through open access and/or purchase of REC, to fulfill the renewable purchase obligation of the States. For this purpose it is decided to engage a consultant to study these issues with detailed analysis and come out with a comprehensive report preparing suitable incentive structure for states to to encourage the procurement of renewable energy through open access and/or purchase of REC.

#### **4.0 Scope of Work:**

Detailed Scope should include following:

4.1 Assessment of states in terms of their participation in the compliance of renewable purchase obligation either through purchase of renewable energy or through purchase of Renewable Energy Certificates (REC) mechanism. This would include assessment of their existing RPO levels, likely RPO trajectory for the 12th plan period and existing as well as likely RPO compliance levels through purchase of RE based power from the projects within the state as well as through purchase of RECs.



- 4.2 In view of resource rich States' reluctance to go for higher RPO, suggest the best approach to achieve high deployment of RE at the least impact on Tariff.
- 4.3 Assessment of additional burden on states due to incremental fulfilment of RPO through purchase of renewable energy and/or RECs.
- 4.4 Preparing suitable incentive structure for these states to reduce the additional burden due to incremental RPO.
- 4.5 Assisting in organizing a seminar to increase awareness among various stakeholders regarding the proposed incentive structure. This would include making presentation and being part of discussion forum/panel to explain and increase awareness about the proposed incentive structure. This would be during the seminar, and also as and when required.

## **5.0 Recommendations & Way forward**

Based on the findings of the study on each of the above aspects the consultant should make suitable recommendations with regard to the implementation strategy and to the commitment that may be desirable on the part of the State governments to enable their distributions utilities to achieve the set RPO obligations and foster development of RE sources.

## **6.0 Deliverables and Duration of Assignment**

The assignment shall be completed within a period of 90 days from the date of award of consultancy. The Consultant will be required to:

- 6.1 Submit Inception Report at the end of 30 days from the date of award of assignment;
- 6.2 Submit draft report at the end of 60 days from the date of award of assignment followed by a presentation before Forum of Regulators;



**6.3** Submit a Final Report at the end of 90 days from the date of award of assignment;

**7.0 Payment Schedule:**

**7.1** 15% advance of the total fee of the study at the time of signing agreement/acceptance of the offer;

**7.2** 15% on submission of the inception report;

**7.3** 30% on submission of the draft report;

**7.4** 30% on submission of the final report; and

**7.5** balance 10% on successful completion and acceptance of the final report by the 'FOR'.

**8.0 Qualification Criteria:**

**8.1** The Consultant, besides being conversant with the working and role of SERCs and having completed or assisted them at least for 2 assignments on regulatory matters, should have sufficient exposure in the area of renewable energy and done at least one assignment for ERC or any other organisation on renewables.

**9.0 Application and Evaluation Criteria:**

**9.1** The format of application is at Annexure-I and Annexure-II.

**9.2** The Consultant is required to submit four (4) copies of bids for Technical offer (each of which will be treated as original) and one copy of Financial offer, duly sealed in separate envelopes.



9.3 Technical component will carry 70% weightage and Finance component 30% weightage.

9.4 The bids of the eligible bidders as per Clause 6 will be scrutinized by Consultancy Evaluation Committee (CEC) and shortlisted bidders will be called for interaction with the CEC and their technical performance will be evaluated based on the following criteria:

<b>Technical Parameters</b>	<b>Weights</b>
The Consultants relevant experience for the assignment	0.3
Understanding of the issues and approach to be followed	0.3
The qualifications and experience of the key staff proposed	0.4

9.5 The minimum qualifying marks in the Technical Evaluation is 50% of the total score for technical component.

9.6 Only those bidders, who qualify technically as per Clause 7.5, would be considered for Financial Evaluation.

9.7 Weight for Financial parameters: Proposal with the lowest cost will be given a financial score of 100 and other proposals given financial scores that are inversely proportional to their prices.

9.8 The total score will be obtained by weighting the Technical and Financial scores.

9.9 Only successful bidder would be communicated the award of consultancy assignment.

9.10 The right to reject any or all bids rests with the FOR Secretariat without assigning any reason.

9.11 The 'FOR' and the Consultant both would have option to terminate the contract by giving a notice of one month or the equivalent remuneration in lieu thereof. In such cases, the Consultant shall be paid fees after taking into consideration the part of work completed prior to such foreclosure,



*TOR- study on Preparing incentive structure for States for fulfilling  
Renewable Purchase Obligation (RPO) targets*

termination or cancellation of the engagement as may be decided by the 'FOR', and the decision of the 'FOR' shall be conclusive and binding. The fees so fixed and paid shall be deemed to be final payment in such cases.

**9.12** The consultant shall abide with the contract as per Annexure-III.



**9.13 / ANNEXURE - I /**

**DETAILED PROPOSAL FOR STUDY**  
**(TECHNICAL)**

**Four (4) copies** of the proposal along with project summary to be submitted to Secretary, CERC/FOR.

**I. GENERAL INFORMATION:**

01. Title of the Proposed Study :
02. Name and address of the Organization/ :  
Institution
03. Name & Designation of the Key Person :
04. Contact address of the Key Person :  
(e-mail/ fax/ telephone)
05. Net-worth/Turnover of the Organization/ :  
Institution



**II. TECHNICAL SPECIFICATIONS:**

06. i. Department(s) of the organization/Institution(s) where the study will be carried out

ii. Other department(s), if any, which will collaborate in this study

07. Brief review of the state-of-art in the field (National and International)

08. Detailed Approach & Methodology for undertaking the assignment

09. Facilities available for the proposed work in the applicant's organization/institution

10. Previous experience of the proposer in this or related field

11. Biographical sketch of the Study Team

(i) Name

(ii) Designation

(iii) Date of Birth

(iv) Education and Experience

(a) Academic Qualifications

Degree	University	Field(s)	Year



(b) Experience

Institution	Topic of work done	Period

(v) Field of major interest

(vi) Additional information (if any)

12. Capacity to impart training/transfer of knowledge





## II. Fee Proposed:

07. Amount of Fee proposed for:

Components	Basis	Amount (in Rs.)
(I) Consultant Charges		
(II) Misc./Others (if any)		
<i>Total</i>		

(RUPEES \_\_\_\_\_)

Signature of the Principal Investigator /  
Head of the Study Team



**/ Appendix-'A' /**

**CERTIFICATE**

The undersigned agree to abide by the conditions of the grants and certify that available facilities for proposed work shall be extended to the investigator/study team.

Signature of Executive Authority  
Investigator/of the Organisation

Signature of the Principal  
Head of the Study Team

Name and Designation

Name and Designation

Date

Date

Signature of Co-investigator

Name and Designation

Date

Official stamp of

Organization/Institution



/ ANNEXURE - III /

AGREEMENT

ARTICLES OF AGREEMENT made on this day of BETWEEN  
M/s \_\_\_\_\_ of one part and the Forum of Regulators (herein after called  
"the FOR") of the other part.

WHEREAS the FOR has engaged the party of the first part to conduct a Study on  
"Assessment of achievable potential of New and Renewable Energy resources in  
different States during the 12th Plan Period, determination of RPO trajectory and its  
impact on Tariff" and the party of the first part has agreed, to conduct the said study  
and submit the report to the FOR, on the terms and conditions hereinafter contained.

NOW THESE PRESENTS WITNESS and the parties hereto respectively agree  
as follows:

1. The party of the first part shall complete the assignment as contained in  
Annexure-I (TOR) within a period of 3 (Three) months commencing from .....,  
2009.
2. The party of the first part shall be paid as under:
  - a) 15% advance of the total fee of the study at the time of signing  
agreement/ acceptance of the offer;
  - b) 15% on submission of the inception report;
  - c) 30% on submission of the draft report;
  - d) 30% on submission of the final report; and
  - e) Balance 10% on successful completion and acceptance of the final report by the  
'FOR'.

The total fee for the study has been fixed at Rs.....  
(exclusive of taxes, if any).



3. The schedule of payment shall be as under:  
As per clause 2 above.
  
4. The party of the first part shall not disclose to any unauthorized person any information and data that may be supplied to him by the FOR or by any other organization, under the direction of the FOR. All such documents shall be the property of the FOR or any information that may have come to their knowledge directly or indirectly by virtue of the assignment.
  
5. The party of the first part undertakes that this assignment shall not be in conflict with their prior or current obligation to other clients nor shall it place them a position of not being able to carry out the assignments objectively and impartially.
  
6. In case of any default on the part of the party of the first part in completion of the study within the time schedule agreed to between the parties as herein above, the party of the second part shall be at liberty to get the study completed from any other agency at the risk and cost of the party of first part.
  
7. In case of any differences or disputes between the parties arising out of this Agreement, it shall be referred for arbitration as per the provisions of Arbitration and Conciliation Act, 1996, as amended from time to time. The venue of the arbitration shall be Delhi.
  
8. The 'FOR' and the Consultant would both have option to terminate the contract by giving a notice of one month or the equivalent remuneration in lieu thereof. In such cases party of the first part shall be paid fees after taking into consideration the part of work completed prior to such foreclosure, termination or cancellation of the engagement as may be decided by the 'FOR', and the decision of the 'FOR' shall be conclusive and binding. The fees so fixed and paid shall be deemed to be final payment in such cases.



*TOR- study on Preparing incentive structure for States for fulfilling  
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9. In respect of any matter for which no provision has been made in this Agreement, the provisions contained in the general instructions of the Government on the subject of engagement for study shall apply.

In witness whereof the party of the first part and \_\_\_\_\_ to the FOR on behalf of the FOR have hereto put their hand the day and the year first above written.

Signed by, the party of the first part in the presence of

Signed by, the said to the 'FOR' for and on behalf of the FOR in the presence of