



BUREAU OF ENERGY EFFICIENCY

Request for Proposal

For

Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit

To be submitted to,

*Secretary
Bureau of Energy Efficiency,
Ministry of Power, Govt. of India,
4th Floor, Sewa Bhawan,
R. K. Puram, New-Delhi 110066,
INDIA*

1. Letter of Invitation

This Request for Proposal (RfP) is for **Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit.**

In order to promote implementation of energy efficiency measures in the existing buildings, the Government of India has voluntarily introduced a scheme of Star Rating of Buildings covering Office Building, BPOs, Hospital and Shopping Mall, BEE developed a voluntary Star Rating Programme for buildings which is based on the actual performance of a building, in terms of energy usage in the building over its area expressed in kWh/sqm/year. The Star Rating Scheme for such Commercial Buildings rates buildings on a 1-5 star scale, with 5-Star labelled buildings being the most energy efficient. Star Labels for day use office buildings, BPOs, Hospitals and Shopping Malls have been developed. A 1-5 Star scale, with 5 Star labelled buildings being the most efficient. The scheme is in vogue on a voluntary basis and label provided under it is applicable for a period of 5 years from the date of issue. The scheme is applicable to commercial buildings having a connected load of 100 kW or above contract demand of 120 kVA or above.

Energy Audit Studies have revealed a savings potential to the extent of 40% in end use such as lighting, cooling, ventilation, refrigeration etc. Energy cost savings resulting from EE measures directly benefit building owners and occupants over the life cycle of the building. BEE aims to undertake retrofit projects for various buildings through energy audit.

Agencies as following may download the RFP document from the website <http://www.beeindia.gov.in>. The submission of the RFP document must be accompanied with the payment of the bid processing fees of Rs. 1,000/- (INR One Thousand only). The payment will be accepted in the form of crossed demand draft on any scheduled bank, payable at par in New Delhi in favour of Bureau of Energy Efficiency, New Delhi.

Last Date for Submission of RfP: 16:00 hrs (IST) on November 29, 2019. In case of any clarifications, the agencies may contact Shri Saurabh Diddi, Director, BEE [Tel:\(+91\)-11-26766730](tel:+911126766730), Email: sdiddi@beenet.in.

Secretary, Bureau of Energy Efficiency

Sr.No	Subject	Particulars
1	Name of Employer and Project	BEE Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit.
2	Last Date/ Time and Venue for submission of bids	29/11/2019, 16:00 Hrs Address: BEE office, 4th floor, Sewa Bhawan, R K Puram, New Delhi-110066
3	Nodal officer for issuing clarifications	Sh. Saurabh Diddi Director, BEE office, 4th floor, Sewa Bhawan, R K Puram, New Delhi Tel-011-26766730; E-mail: sdiddi@beenet.in
4	Contact person for submission of the bids	Secretary BEE office, 4th floor, Sewa Bhawan, R K Puram, New Delhi Tel-011-26766704 E-mail: bee-secretary@beenet.in
5.	Financial bid opening	Date of bid opening will be communicated later.
6.	Validity of the Bid	The bid must remain valid till <u>3 months</u> from the date of submission.
7.	Submission of bids	Original financial bids (sealed in envelope) to be submitted.
8.	Method of selection	Financial bids would be opened and work shall be awarded to the lowest (L1) bidder.
9.	Expected date and place of commencement	Agency will sign the contract after fulfilling all the formalities/pre-conditions <u>within 5 days</u> of issuance of the letter of intent/award.

Sr.No	Subject	Particulars
10	Eligible Agencies for bidding	<ol style="list-style-type: none"> 1. The agency must be government agency/ autonomous body/ statutory body/ PSU. 2. The agency should have experience in Energy auditing of Buildings/Industries for last five years. 3. The agency should successfully complete at least five energy audit projects in last five years.

2. Scope of Work

The scope of work requires the retainer consultant to undertake work pertaining to star rating of buildings. This includes undertaking exercise of energy audits of the buildings, providing star rating in accordance to present energy consumption of buildings and existing norms for various categories of buildings, laying out recommendations for improvement star rating of the building and its re-validation upon implementation of the recommendations by the building owners. The representatives from the selected agency would be stationed in BEE and may be asked to travel to respective building location, as and when required.

The scope of work has been defined for conducting walk through energy survey shall include the following energy systems:

1. Electricity metering system
2. Electrical supply and distribution system
3. Diesel generators
4. Lighting system
5. Air conditioning system
6. Hot water boiler system
7. Building Management system
8. Any other system, as specified in the Annexure A

The various components affecting energy consumption of the building to be studied in detail are explained below.

2.1 Electricity metering system

To check the electricity bills and the metering system used to record electricity consumption (kWh) for the building.

2.2 Electrical supply and distribution system

The basic objective of the electrical supply and distribution system study is to establish hourly electrical demand of the building and the energy performance index (kWh/sqm/yr) of the building. The motor loading for air conditioning pumps, kitchen equipments, water pumps (swimming pool and others), lifts, ventilation fans etc shall be established.

2.3 Diesel generator

Establishing the specific energy generation ratio of diesel generators and establishing the potential of using the hot exhaust gases from DG for preheating the water.

2.4 Lighting system

The lighting levels at typical floors and spaces shall be established. Lighting system efficiency and ways to improve the existing efficiency levels by evaluating options of installing higher efficiency lamps and by integration of various controls (for e.g. occupancy sensors) shall be established.

2.5 Air Conditioning system

The objective of conducting air conditioning conducting system study is to establish the following

- The hour by hour annual variation of building cooling demand (TR) shall be established using data collected (design and operating) for a day.
- Establishing chiller operating efficiency using log book data.
- Establishing pump efficiency using log book data.
- Establishing Cooling tower effectiveness using log book data.
- Annual average plant efficiency (kW/TR) shall be established.

2.6 Hot water boiler

Establishing the efficiency of hot water boiler and identifying ways to improve the efficiency of boiler.

2.7 Building management system

Review of existing energy management control incorporated in the BMS and use of BMS features for operation of different energy consuming systems.

3. Deliverables in the Audit Report & Retrofitting (If Required)

The Energy Audit report should contain the following information:

- Methodology adopted for the study.
- Present energy scenario & performance of the building.

- Detail analysis of the data obtained through field visits, trial measurements by portable gadgets, discussion with concerned personnel etc.
- The assessment report of maximum load of venues viz-a-viz capacity of substations feeding the venues
- Energy Performance Index for ensuring the Star rating of the building.
- Recommendations for energy saving options in all possible areas with complete cost-benefit analysis.
- In case of noncompliance with the EPI to award the building with a 5 Star Rating, detailed Implementation Plan for retrofitting together with break-up of different cost estimation for basic cost, M&V cost, M&V protocol for EEMs; O&M cost, methodology for calculation & assumptions for operation of hours, measurements, energy saving calculation etc.

Further, for Star Rating applications, information related to Buildings mentioned under viz. area, air condition status, controlling authority, electricity/fuel consumption are indicative only based on the information received as provided in **Annexure A** (Actual values may differ). Bidders are advised to gather information directly from site or concerned officials of state agencies.

4. Time Schedule

The time schedule and team to be deployed would be decided by Bureau of Energy Efficiency in consultation with the selected agency based on the scope of work.

5. Payment Terms

- The representatives of agencies may be asked to be stationed in the BEE office or outstation in case of data verification or audit.
- The cost incurred in the travelling and boarding & lodging, if any, would be as per the entitlement of the officials engaged in the parent organization in the work and shall be reimbursed by BEE on actual basis.

6. Performance Guarantee

- Performance security @ Rs 1 lakh shall be deposited by the successful bidder by the way of Banker's Cheque/ Demand Draft/ Bank Guarantee drawn in favour of "Bureau of Energy Efficiency", payable at New Delhi.
- Performance security shall remain valid for a period of 1 year. The performance

security may be further extended by another 1 year on the basis of mutual agreement.

7. Validity

The validity of the contract will be initially for a period of 1 year which is further extendable to 1 more year on the basis of mutual agreement.

8. Penalty

- In case of default of adhering to the time schedule, Liquidation Damages (LD) to the extent of 0.5% of the total man-day cost per day subject to a maximum of 10% of the total man-day cost would be levied.

9. Evaluation Criteria

The financial proposal submitted should specify the man-day cost. The work will be awarded only to the lowest (L1) bidder after financial bid evaluation based on quoted man-day cost.

10. Calculation of Man days.

Calculation of man days will be done as per the connected load of the building as below:

S.No.	Contract demand (kVA)	Man-days required
1	Up to 250	3
2	251 to 500	4
3	Above 500	5

If the building owner mentions about the connected load in kW, Power Factor (PF) of 0.85 would be considered for conversion to kVA.

NOTE:

- 1) Separate envelope should be submitted by the bidder and should be marked as '**Bid submission against the RfP for Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting energy audit.**
- 2) Bid should be accompanied with a **Bid processing fee*** of INR 1000/- in form of DD drawn in favor of '**Bureau of Energy Efficiency, New Delhi**'.

Contact details (**Bureau of Energy Efficiency**)

Submission of bids: Secretary, Bureau of Energy Efficiency, 4th Floor, Sewa Bhawan, R K Puram, New Delhi – 110066

11. Contents of the Proposal

Bidding agency is expected to examine all instructions, forms, terms & conditions and Statement of Work in the Proposal. Failure to furnish all information required or submission of a Proposal not substantially responsive to the Proposal in every respect will be at the risk and may result in the rejection of the application.

12. Conflict of Interest

Bidding agency should not have any conflict of interest with the work that is needed to be undertaken.

13. Language of Proposal

The Proposals prepared by the agency and all correspondence and documents relating to the proposal exchanged by the agency and BEE, shall be written in the English language, provided that any printed literature furnished agency may be written in another language so long the same is accompanied by an English translation in which case, for purposes of interpretation of the Proposal, the English translation shall govern.

14. Confidentiality

BEE requires that recipients of this document to maintain its contents in the same confidence as their own confidential information and refrain from any public disclosure whatsoever.

15. Authorized Signatory for Agency

The "Agency as used in the Proposal shall mean the one who has signed the Bid document forms. The authorized signatory should be the duly Authorized Representative of the Agency, for which a certificate of authority will be submitted. All certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall, as far as possible, be furnished and signed by the Authorized Representative.

The power or authorization, or any other document consisting of adequate proof of the ability of the signatory to bind the agency shall be annexed to the Proposal. BEE may reject outright any Proposal not supported by adequate proof of the signatory's authority.

16. Contact details of the Agency

Agency who wants to receive BEE's response to queries should give their contact details to BEE. The Agency should send their contact details in writing at the BEE's contact address as indicated in document.

17. Other Terms & Condition

- BEE will empanel the agencies, in accordance with the method of evaluation set by BEE. The conclusion based on the judgment by BEE committee shall be considered as the result.
- BEE reserves the right to reject any or all the proposals received at its discretion, without assigning any reason whatsoever, and no costs would be paid to agency for the same.
- Acceptance of the Proposal will rest with the Competent Authority of the BEE. No reasons will be given for acceptance or rejection of the contract thereof.
- The BEE reserves the right to cancel this RFP. Any and all proposals may be rejected in whole or in part when it is in the best interest of the BEE.

Financial Proposal

Annexure-1

To
Shri -----,
Secretary, BEE
Address

Dear Sir,

Sub: Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit

1. The undersigned Bidders, having read and examined in detail all the documents in respect of **Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit**; and do hereby submit their proposal to provide services as specified in the scope of work.

2. Correspondence Details: Our correspondence details are:

1	Name of the Bidder	
2	Address of the Bidder	
3	Name of the contact person to whom all references shall be made regarding this tender	
4	Designation of the person to whom all references shall be made regarding this tender	
5	Address of the person to whom all references shall be made regarding this tender	
6	Telephone (with STD code)	
7	E-Mail of the contact person	
8	Fax No. (with STD code)	

Work shall be awarded only to the lowest (L1) bidder after financial bid evaluation

*Note: Each envelope containing Financial proposal should be written with i.e “**Bid**”*

submission against the RfP for Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit and “Not to be opened before the 29/11/2019 at 16:00 hrs”.

Envelope (A)- Financial Proposal

Form 1: Organizational Profile & Team details

Form 2: Total financial Cost

Form 3: Declaration Letter

Form 4: Project Details.

Bid processing fee* of INR 1000/- in form of DD drawn in favor of **BEE**.

Financial proposals without Bid Processing fee will be rejected directly and not considered for evaluation. **Separate financial proposal (along with bid processing fee) should be submitted by the firm in separate sealed envelope mentioning the name of the cluster on the envelope.**

Copy of Registered Power of Attorney executed by the Bidder in favor of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this proposal

We hereby declare that our proposal is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

Thanking you,

Yours faithfully

(Signature of the Bidder)

Name :

Designation :

Seal :

Date :

Place :

Business Address:

Witness:

Signature

Name

Address

Date

Bidder:

Signature

Name

Designation

Company

Date

FORM 2 - Total financial Cost

[Location, Date]

FROM: (Name of Firm)

TO: (Name and Address of Client)

Subject: Financial Proposal for Hiring of Retainer consultant for supporting BEE in data verification of Star Rating applications (Fresh & Renewal) for Buildings and conducting walk through energy audit.

I/We, the undersigned, offer to provide the services for the above in accordance with your Request for proposal dated (Date), with our Financial Proposal.

Our Financial Proposal is for the sum of [amount in words and figures] for **per man-day**. The financial proposal shall take into account all expenses and tax liabilities associated in execution of the deliverables as per the RFP. GST, if any, will be applicable as per prevailing rates. BEE shall in no way be responsible to incur any other extra costs associated with this task, except TA and DA.

Our financial proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal, i.e., [Date].

We confirm that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act, 1988".

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of the Firm:

Seal:

Form 3 - Declaration letter

Declaration Letter on official letter head stating the following:

We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this contract

We are not black-listed by any Central / State Government / Public Sector

Undertaking in India

Witness:		Bidder:	
Signature		Signature	
Name		Name	
Address		Designation	
		Company	
Date		Date	

Disclaimer

BEE and its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of BEE and/or any of its officers, employees.

Form-4

List of Energy Audit Projects implemented by the bidder Organization

List of Projects	Type of Projects	Duration of the Project	Description of the project	Cost of the Project
1				
2				
3				
4				
5				

The agency must furnish LoA, project completion certificate/final payment certificate.

Annexure A

Building Details (*the following information and energy data may change as per the category of the Building.

Table 1: Building Information and Energy Data

Primary Data		Year:
No.	Item	Value
1	Connected Load (kW) or Contract Demand (kVA)	
2	Installed capacity: DG/ GG Sets (kVA or kW)	
3	a) Annual Electricity Consumption, purchased from Utilities (kWh)	
	b) Annual Electricity Consumption, through Diesel Generating (DG)/Gas Generating (GG) Set(s) (kWh)	
	c) Total Annual Electricity Consumption, Utilities + DG/GG Sets (kWh)	
4	a) Annual Cost of Electricity, purchased from Utilities (Rs.)	
	b) Annual Cost of Electricity generated through DG/GG Sets (Rs.)	
	c) Total Annual Electricity Cost, Utilities + DG/GG Sets (Rs.)	
5	Area of the building (exclude parking, lawn, roads, etc.)	a) Built Up Area (sqm)(Excluding Basement Area)
		o Conditioned Area(in sqm)
		o Conditioned Area(as % of built up area)
6	Working hours (e.g. day working /24 hour working)	
7	Working days/week (e.g. 5/6/7 days per week)	
8	a) Office	Total no. of Employees
		Average .no. of Persons at any time in office during office hours
9	a) Installed capacity of Air Conditioning System (TR)	
10	Installed lighting load (kW) (if available)	
12	HSD (or any other fuel oil used, specify)/Gas Consumption in DG/GG Sets (liters/cu. meters) in the year	
13	Fuel (e.g. FO, LDO,LPG, NG) used for generating steam/water heating in the year (in appropriate units)	
14	EPI(Energy Performance Index) in kWh/sqm/year Energy includes electricity purchased and generated (excluding electricity generated from on-site renewable resources)	
15	Star Label applied for	

I hereby declare that the building is fully occupied for the last one year and all the above furnished information is true in all respect

Signature of the building owner
or authorized representative