

## **Request for Financial Proposal (RfP)**

**Name of Work: Hiring of Energy Service Companies (ESCOs) for Energy audit work of the Supreme Court premises.**

The Supreme Court of India is the highest judicial forum and final court of appeal under the Constitution of India, the highest constitutional court, with the power of constitutional review. It comprises the Chief Justice of India and 30 other judges. It has original, appellate and advisory jurisdictions. As the final court of appeal of the country, it takes up appeals primarily against verdicts of the High Courts of various States of the Union and other courts and tribunals.

Supreme Court of India came into existence on 26th January, 1950 and is located on Tilak Marg, New Delhi. The building is shaped to symbolize scales of justice with its centre-beam being the Central Wing of the building comprising the Chief Justice's court, the largest of the courtrooms, with two court halls on either side. The Right Wing of the structure has the bar - room, the offices of the Attorney General of India and other law officers and the library of the court. The Left Wing has the offices of the court. In all there are 15 court rooms in the various wings of the building.

### **1. Letter of Invitation**

This Request for Proposal (RfP) is for **Hiring of Energy Service Companies (ESCOs) empanelled with BEE for carrying out of Energy audit work of the Supreme Court premises.** In order to promote implementation of energy efficiency measures in the existing buildings, the Government of India has approved a scheme to provide assistance for conducting Investment Grade Energy Audits (IGEA) for government buildings at central as well as state level.

Interested **ESCOs** may download the RfP document from the website <http://www.bee-india.nic.in>. The submission of the RfP document must be accompanied with the payment of the bid processing fees of Rs.5,000/- (INR Five 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: 15:00 hrs (IST) on **11<sup>th</sup> February, 2016**. In case of any clarifications, **ESCOs** may contact Shri. Sanjay Seth, Energy Economist, BEE Tel :(+91)-11-2617-9658, Fax: (+91)-11-2617-8352, Email: sseth@beenet.in .

Secretary,

Bureau of Energy Efficiency

Sr.No	Subject	Particulars
1	Name of Employer and Project	BEE <b>Hiring of Energy Service Companies (ESCOs) empanelled with BEE for carrying out of Energy audit work of the Supreme Court premises</b>
2	Last Date/ Time and Venue for submission of bids	<b>11/02/2016</b> 15:00 Hrs <b>Address:</b> Bureau of Energy Efficiency, 4th Floor, Sewa Bhawan, R K Puram, New Delhi
3	Nodal officer for issuing clarifications	<b>Shri</b> Girja Shankar Asstt. Energy Economist BEE office, 4th floor, Sewa Bhawan, R K Puram, New Delhi Tel-011-26179699; Cell-09868880656 email: <a href="mailto:gshankar@beenet.in">gshankar@beenet.in</a>
4	Contact person for submission of the bids	<b>Shri</b> Sanjay Seth Energy Economist BEE office, 4th floor, Sewa Bhawan, R K Puram, New Delhi Tel-011-26179658 email: <a href="mailto:sseth@beenet.in">sseth@beenet.in</a>
5.	Financial bid opening	<b>11/02/2016 15:30 Hrs</b>
6.	Validity of the Proposal	The Proposal must remain valid till <u>60 days</u> from the date of submission of bids.
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	ESCO will sign the contract after fulfilling all the formalities/pre-conditions <u>within 3 days</u> of issuance of the letter of intent/award.
10.	Expected date of completion of the project	The agency is expected to complete the project within 75 days after the signing of the contract. However, activities/ sub-activities are to be completed strictly as mentioned in the time-schedule of the RfP.
11	Eligible ESCOs for bidding	BEE empanelled ESCOs with Grade 1 or 2 only

## 2. Scope of Work

The scope of work include conducting investment grade energy audit of the Supreme Court premises for baseline identification, energy assessment, and assessment of maximum load of venues viz-a-viz capacity of substations feeding the venues and designing of detailed implementation plan for retrofitting as per time schedule.

- Review of present electricity, fuel oil & estimation of energy consumption in various end use energy like lighting, Air-Conditioning, Water Pumping etc. for defining of baseline, static factors and independent variables etc.
- A detail study for energy conservation options of various energy sources like Electricity and Fuel oil in the building campuses and recommend actions for reducing the same.
- Following are the indicative list of systems for performance evaluation, but not limited to,

### a) Electrical Distribution System

- a. Review of present electrical distribution like Single Line Diagram (SLD), transformer loading, cable loading, normal & emergency loads, electricity distribution in various areas / floors etc. and assessment of maximum load of venues viz-a-viz capacity of substations feeding the venues.
- b. Study of Reactive Power Management and option for power factor improvement.
- c. Study of power quality issues like Harmonics, current unbalance, voltage unbalance etc.
- d. Exploring the Energy Conservation Options (ENCON) in electrical distribution system.

### b) Lighting System

- a. Review of present lighting system, lighting inventories, area lighting and stadium lighting system etc.
- b. Estimation of lighting load at various locations like different floors, outside (campus) light, pump house and other important locations.
- c. Detail lux level survey at various locations and comparison with acceptable standards.
- d. Study of present lighting control system and recommend for improvement.
- e. Analysis of lighting performance indices like Lux/m<sup>2</sup>, lux/watt, lux/watt/m<sup>2</sup> and its comparison with norms.
- f. Exploring the Energy Conservation Options (ENCON) in lighting system.

### c) Heating, Ventilation & Air-Conditioning System (HVAC system)

- a. Review of present HVAC system like central AC, window AC, split AC; package AC, Water Coolers, and Air Heaters etc.
- b. Performance assessment of window AC, Split AC and Package AC system.
- c. Performance Assessment of Chillers, Cooling Towers, Air Handling Units (AHUs) and cold insulation system of central AC.
- d. Analysis of HVAC Performance like estimation of Energy Efficiency Ratio (EER i.e. KW/TR), Specific Energy Consumption (SEC) of Chilled Water Pumps, Condenser Water Pumps, AHUs etc and comparison of the operating data with the design data.

- e. Exploring the Energy Conservation Options (ENCON) in HVAC system.

**d) Diesel Generator (DG) Sets**

- a. Review of DG set operation
- b. Performance Assessment of DG sets in terms of Specific Fuel Consumption (SFC i.e. KWH/Liter),
- c. Exploring the Energy Conservation Options (ENCON) in DG Sets.

**e) Water Pumping System**

- a. Review of water pumping, storage and distribution systems.
- b. Performance assessment of all major water pumps i.e. power consumption vs. flow delivered, estimation of pump efficiency etc.
- c. Exploring the Energy Conservation Options (ENCON) in Water Pumping System.

**f) Thermic Fluid Heaters / Boilers**

- a. Performance assessment of hot water generators or thermic fluid heaters like estimation of efficiency etc.
- b. Exploring the ENCON options in this systems

**g) Motor Load Survey**

- a. Conducting the motor load survey of all drives to estimate the % loading.
- b. Exploring the ENCON options in electric drive system.

**h) Energy Monitoring & Accounting System**

- a. Detail review of present energy monitoring & accounting system in terms of metering, record keeping, data logging, periodic performance analysis etc.
- b. Recommend for effective energy monitoring & accounting system.

- Cost-Benefit Analysis of each ENCON options indicating simple payback period, return on investment (ROI), internal rate of return (IRR).
- Preparation of a comprehensive Investment Grade Energy Audit Report, baseline report and submission of the same to BEE / concerned State agencies. Assessment of maximum load of venues viz-a-viz capacity of substations feeding the venues and designing of detailed implementation plan accordingly.
- Designing & presentation of detailed implementation plan with break-up of basic implementation cost, Investment cost calculations, Energy calculations, O&M cost estimation, M&V estimation & protocol etc. for each measure together complete package.
- The Implementation Plan should be shared with Evaluation Committee/CPWD for finalization and the Evaluation Committee/CPWD may instruct the ESCO to amend and revise the proposed plan and select the final proposal for implementation. CPWD are free to modify the proposal of ESCO and selection process of the procurement of materials thereafter. The interim assessment report based on the inventory maintained by CPWD is to be submitted within a week from the date of award.



4	Coordination with CPWD in formulation of specification for tenders of retrofits								
5	Collate information on the implemented ENCON measures and submission of report to BEE & state agencies								

## 5. Liquidated Damage (LD)

In case of default of adhering to the time schedule, Liquidation Damages (LD) to the extent of ½% of the total contract value per week subject to a maximum of 5% of the total contract value would be levied. For any delay beyond 2 months, BEE reserves the right to terminate the contract without assigning any reason(s) & have right to carry out the pending assignment at the ESCOs risk & cost.

### NOTE:

- 1) Separate envelope should be submitted by the bidder and should be marked as '***Bid submission against the RfP for hiring of Energy Service Companies (ESCOs) for Energy audit work of the Supreme Court premises***'
- 2) Bid should be accompanied with a **Bid processing fee\*** of INR 5000/- in form of DD drawn in favor of '**Bureau of Energy Efficiency, New Delhi**'.
- 3) Lowest quoted qualified bidder should have to submit a Performance Guaranty equal to 10% of the financial quote of bid after award of the work.
- 4) **Complete inventory of the equipments and the energy efficiency measures carried out so far will be available with the CPWD officials.**
- 5) **The energy audits may have to be carried out at times when the court is not in session and the availability of access into the chambers.**
- 6) The bidders should quote their rate keeping in view **point 4) and 5) above, the importance of this iconic building and also the concerns regarding accessing the building or areas of the building to carry out the Energy audit work.**

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

- 1) Submission of bids: Secretary, Bureau of Energy Efficiency,

## 6. Financial Proposal

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

Dear Sir,

### **Sub: Hiring of Energy Service Companies (ESCOs) for Energy audit work of the Supreme Court premises.**

1. The undersigned Bidders, having read and examined in detail all the documents in respect of hiring of **anESCO for Energy audit work of the Supreme Court premises;** 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)	
9	Present ESCO Grading	

***Work shall be awarded only to the lowest (L1) bidder after technical evaluation***

1) *Note:*The ESCO should quote their rate keeping in view the importance of this iconic building and also the concerns regarding accessing the building to carry out the Energy audit work. The envelope containing financial proposal should be written with i.e. “Bid submission against ***the RfP for*** hiring of Energy Service Companies (ESCOs) for Energy audit work of the Supreme Court premises *and “Not to be opened before the 11/2/2016 at 15:00 hrs”.*

**Envelope (A)- Financial Proposal**

**Form 1:**Organizational Profile& Team details

**Form 2:**Financial Cost Split

**Form 3:** Declaration Letter

**Bid processing fee\***of INR **5000/-** in form of DD drawn in favor of **Bureau of Energy Efficiency**.

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 ESCO firm in separate sealed envelope.** Successful bidders should have to deposit 10 % of work order amount as a Performance Bank Guarantee after award of the work order.

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**

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



## FINANCIAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: [Name and address of Employer]

Dear Sirs,

We, the undersigned, offer to provide the Assignment/job for conducting **Energy audit work of the Supreme Court premises** in accordance with your Request for Financial Proposal dated [Insert Date]. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures]. This amount is inclusive of all taxes. We hereby confirm that the financial proposal is unconditional and we acknowledge that any condition attached to financial proposal shall result in reject of our financial proposal.

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.

We remain,

Yours Sincerely

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

**6.1. Form1**  
Organizational Profile

Sr.No	Details of the Company/Firm			
1.1	Name of the Company / Firm			
1.2	Year of Registration / Incorporation in India			
1.2	Type of Organization (Service /Manufacturer/Consultants etc.)			
1.3	Present ESCO Grading			
1.4	Number of Permanent Employees			
1.5	Number of key Personnel working with the company since last two years			
1.6	List of team members / employees for the proposed task of Energy audit of Supreme Court premises (Attached separate CV of team members)	Team composition	Name	Contact details
		Team Leader		
		Energy Auditor-1		
		Energy Auditor-2		
		Supporting staff		
1.7	Mailing address			
1.8	Telephone No.			
1.9	Fax No.			
1.10	Email			

Witness:		Bidder:	
Signature		Signature	

Name		Name	
Address		Designation	
		Company	
Date		Date	

**6.2. Form-2**

**Financial Cost Split**

**SUMMARY OF COSTS**

S.No.	Particulars	Amount Rupees	in	Amount words	in
1	Remuneration* (carrying out Energy audit work of the Supreme Court premises))				
2	<u>Total</u>				

\* **Cost includes the work of conducting investment grade energy audit of the buildings for baseline identification, energy assessment and designing of detailed implementation plan for retrofitting**

Authorized Signature Name: .....

Designation .....

Name of firm: \_\_\_\_\_

Address: \_\_\_\_\_

### 6.3. Form3

#### 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

<b>Witness:</b>		<b>Bidder:</b>	
<b>Signature</b>		<b>Signature</b>	
<b>Name</b>		<b>Name</b>	
<b>Address</b>		<b>Designation</b>	
		<b>Company</b>	
<b>Date</b>		<b>Date</b>	

**7. Data of Buildings:-**

**General Information**

Building Name : <b>Supreme Court of India</b>
Building owned by : <b>Supreme Court of India</b>
Name and Designation of Nodal officer / person for Energy Audit : <b>Col K.B. Marwaha, Additional Registrar (AG)</b>
<b>Contact Details of Nodal Officer:</b>
Phone No: 011- 23012378/ +91-9560711005
Email ID: <a href="mailto:adreg.kbmarwaha@sci.nic.in">adreg.kbmarwaha@sci.nic.in</a>

**Building Area Details**

Block No.	Floor	Conditioned Area (Sq.Mtr)	Nature of Activity (Office/ Shopping/ Parking)	
1	Basement & Ground + 3	43572.24	Office	
Number of Buildings in the complex and their individual load		Single 1737.5 kW		
Number of Metering Points, their connected load and total connected load		1 at 11 kV 1 x 1737.5 = 1737.5 kW		
Total contract demand and contract demand at individual metering points		1737.5 kW		
<b>Installed DG capacities and HSD Consumption (2 years)</b>				
DG No.	Year	Capacity (kVA)	Working Hours	HSD Consumption
1	2014	312.5	35 Hours	1300 Ltr.
1	2015	312.5	36 Hours	1400 Ltr.
2	2014	380	8 Hours	350 Ltr.
2	2015	380	15 Hours	650 Ltr.
3	2014	380	23 Hours	930 Ltr.
3	2015	380	39 Hours	1550 Ltr.

<b>Total Electricity Consumption per annum (2 years)</b>					
<b>Meter No.</b>	<b>Year</b>	<b>Contract Demand (kW/kVA)</b>	<b>Units (kWh)</b>	<b>kvarh</b>	<b>Average PF</b>
1	2014	1737.5 kW		4259000	0.92
1	2015	1737.5 kW		3215400	0.92
<b>Total electricity purchased from utilities</b>				65067726.00	
<b>Total electricity generated by DG</b>				54487 kVAh	
<b>Whether the air conditioning is centralised/ individual</b>				Yes	
<b>If centralized, number of AC Plants with plant capacities, Type</b>				550 Tons – 2 Nos. Centrifugal 350 Tons – 1 No. Centrifugal	
<b>Administrative body in-charge of overall controls with contact details</b>				Mr. R P Arora Registrar (AG) 011-23382202 9868206262	
<b>Controlling body for operation and maintainence</b>				Mr. A K Nirmal Executive Engineer (E), 011-23412933 9910530111	