

**REQUEST FOR PROPOSAL
FOR
HIRING OF ENERGY AUDITING FIRM FOR ENERGY AUDIT
WORK OF RAILWAY'S TRACTION SUB-STATIONS.**



**BUREAU OF ENERGY EFFICIENCY
4th Floor, Sewa Bhawan, R.K Puram
New Delhi-110066**

August, 2016

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1. LETTER OF INVITATION

1.1. Advertisement

Reference No: _____

Project Name: Perform, Achieve & Trade (PAT)

Name of the Ministry / Department: Ministry Of Power/ Bureau of Energy Efficiency

LETTER OF INVITATION

Project Name: Request for proposal for hiring of energy auditing firm for energy audit work of Railway's traction sub-stations located at various places across India.

Name of Ministry / Department: Bureau of Energy Efficiency

The Bureau of Energy efficiency (BEE) (hereinafter called the "Employer") is intending to appoint Agencies for conducting the energy audit work of Railway's Traction sub-stations located at various places across India.

1. The Employer intends to conduct the energy audit of Twenty Railway Traction sub-stations spread across 10 states in the country (List attached as Annexure-2). List of equipment installed at traction sub-stations attached as Annexure-3.
2. Interested energy auditing firm may download the RFP document from the website <http://www.beeindia.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 favor of Bureau of Energy Efficiency, New Delhi.
3. The last date for receipt of separate Technical and Financial bids is 12th September, 2016 at **Bureau of Energy Efficiency, 4th floor, Sewa Bhawan, R K Puram New Delhi – 110066, Tel No.:-91-11-26179699**

Yours sincerely,

(Secretary)
Bureau of Energy Efficiency

1.2. Critical Information

1.	Availability of invitation for RFP	17 th September, 2016
2.	Date of pre-bid meeting	29 th September, 2016
3.	Last date for receipt of Proposal	10 th October, 2016
4.	Date of opening of tender	To be informed during pre-bid meeting
5.	Place of opening of Proposal	Bureau of Energy Efficiency, 4th floor, Sewa Bhawan, R K Puram New Delhi – 110066, Tel No.: -91-11-26179699
6.	Mode of Selection	Open Tender.
7.	Type of Proposal Required	Technical and Financial
8.	Proposal & Reports Should be submitted in following language	English
9.	Taxes	bidders are requested to quote prices inclusive of taxes unless stated otherwise
10.	Currency	Consultants to state all costs in Indian Rupees (INR)
11.	Validity	Proposals must remain valid for 120 days after the submission date
12.	Earnest Money Deposit (EMD)	50,000/- (INR Fifty thousand only) in the form of DD drawn in favor of the Employer (Bureau Of Energy Efficiency) and payable at New Delhi.
13.	Bid processing fees	Rs. 5,000/- (INR Five thousand only) in the form of DD drawn in favor of the Employer (Bureau Of Energy Efficiency) and payable at New Delhi.
14.	Lead time for commencement of work.	15 days from the date of intimation of award of work to the successful bidders
15.	No. of copies of Technical and Financial Proposal	Technical Proposal: Duly Signed Original (hard copy) – 1 No. Signed/Scanned PDF file (in a CD) – 1 No. Financial Proposal: Only 1 No. of duly signed original (hard copy) copy for each group of Traction sub stations the bidder wants to bid for (details in section 4.4). File in soft copy shall NOT be submitted.
16.	Email address for Clarification	mdeore@ beenet.in
17.	Project Coordinator	Sh. Milind Deore, Energy Economist, BEE 4th Floor, Sewa Bhavan, Sector 1 R.K. Puram, New Delhi – 110016 (INDIA)
18.	Submission of RFP	Secretary, BEE 4th Floor, Sewa Bhavan, R.K. Puram Sector 1, New Delhi – 110066 (INDIA) +91-11-2617-9699/ +91-11-2617-9691 Fax: +91-11-2617 8352

Note: BEE will use Email as a primary mode of communication and will upload all relevant information on BEE website (www.beeindia.nic.in)

2. BACKGROUND INFORMATION

2.1 About BEE

The mission of Bureau of Energy Efficiency (BEE) is to develop policy and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act (EC Act), 2001 with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in accelerated and sustained adoption of energy efficiency in all sectors.

The setting up of Bureau of Energy Efficiency (BEE) provides a legal framework for energy efficiency initiatives in the country. The Act empowers the Central Government and in some instances the State Governments to:

1. Notify energy intensive industries, other establishments, and commercial buildings as designated consumers.
2. Establish and prescribe energy consumption norms and standards for designated consumers.
3. Direct designated consumers to designate or appoint certified energy manager in charge of activities for efficient use of energy and its conservation.
4. Get an energy audit conducted by an accredited energy auditor in the specified manner and intervals of time.
5. Furnish information with regard to energy consumed and action taken on the recommendation of the accredited energy auditor to the designated agency.
6. Comply with energy consumption norms and standards, and if not so, to prepare and implement schemes for efficient use of energy and its conservation.
7. Prescribe energy conservation building codes for efficient use of energy and its conservation in commercial buildings –State Governments to amend the energy conservation building codes to suit regional and local climatic conditions. –
8. Direct owners or occupiers of commercial buildings to comply with the provisions of energy conservation building codes.
9. Direct mandatory display of label on notified equipment and appliances.
10. Specify energy consumption standards for notified equipment and appliance.
11. Prohibit manufacture, sale, purchase and import of notified equipment and appliances not conforming to standards.

The Energy Conservation Act, 2001 defines the powers of the State Government to facilitate and enforce efficient use of energy and its conservation. The State Governments have to designate State Designated Agencies in consultation with the Bureau of Energy Efficiency to coordinate, regulate and enforce the provisions of the Act in the State. Thus the State Designated Agencies are the strategic partners for promotion of energy efficiency and its conservation in the country.

3. TERMS OF REFERENCE

3.1. SCOPE OF WORK

The energy audit of the traction power supply system and equipment installed at traction sub-stations shall be carried out and detailed report shall be submitted to BEE and RDSO/Railways. Scope of work for detail energy audit should cover following:

- i. Review of Electricity Bills, Contract Demand and Power Factor: For the last one year, in which possibility will be explored for further reduction of contract demand and improvement of power factor.
- ii. Electrical System Network: Which would include detailed study of all the Transformer operations of various Ratings / Capacities, their operational pattern, Loading, No Load Losses, Power Factor Measurement on the Main Power Distribution Boards and scope for improvement if any. The study would also cover possible improvements in energy metering systems for better control and monitoring.
- iii. Qualitative and quantitative study of all components of energy payables i.e. KW, kWh, kVAR, Maximum Demand Factor and harmonics etc.
- iv. Study of system network, ratings/capacities, operational pattern and energy metering system.
- v. Study voltage profiles of 25 kV lines, variations in the system voltage and optimum voltage for utilization with highest energy efficiency, energy flow study.
- vi. To identify and quantify the energy loss that occurs in different parts (subparts/equipment) of traction power supply system.
- vii. To suggest various methods of saving energy by improving network layout, installing energy efficient devices/equipment and optimizing capacities of the equipment.
- viii. Issue of harmonic supply.

3.1.1 APPROACH & METHODOLOGY:

The assignment will cover all aspects of the project as set in the project proposal to establish whether the planned activities and anticipated outputs have been attained, and whether there are outcomes to document emanating from the project's interventions. While maintaining independence/neutrality, the review shall adopt a participatory approach.

The consultant will be expected to provide a detailed evaluation design that includes key evaluation questions, key indicators, sources of data/information, and data collection methods and instrument including key tasks, activities and timelines.

Furthermore, the review shall be structured in respect to the three evaluation criteria i.e. relevance, efficiency and effectiveness against original project objectives, taking into account of the realities on the ground; and the extent to which the project addressed the needs of its stakeholders.

3.2 ELIGIBILITY CRITERIA

The agencies/ Lead Consortium agencies interested in being considered for this task must fulfil the following criteria:

- ✓ Should be an agency / firm / company registered/ incorporated in India. Necessary documents should be provided to substantiate the claim.

- ✓ Should have at least 2 BEE Accredited Energy Auditors and 4 BEE Certified Auditors as on the date of applying. A photocopy of the certificates of BEE Certified Energy Auditors should be enclosed as proof.
- ✓ Should have experience of carrying out Energy Audit in Railways or of Electrical Distribution Substations or both. Experience of carrying out Energy Audit for Railways Traction Substations is desirable. Necessary documents should be provided to substantiate the claim.
- ✓ Should have a minimum annual turnover of INR 50 lakhs (INR or its equivalent in foreign currency) in two of the last three years i.e. FY 2013-14, 2014-15 and 2015-16. The audited annual statements for the last three years should be submitted to substantiate the claim.
- ✓ Should have net worth of at least INR 100 lakhs (INR or its equivalent in foreign currency) in two of the last three years i.e. FY 2013-14, 2014-15 and 2015-16. The audited annual statements for the last three years should be submitted to substantiate the claim.
- ✓ For the purpose of the study the energy auditing team should be ready to travel at any location of Traction Sub Station in the country under the guidance of BEE officials. The team officials indicated by the agency/firm during participation in the tender should be strictly adhered to and not changed.

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Designation	Number	Qualification	Total Experience	Area of Experience
Team Leader	1	BEE Accredited Energy Auditor	15 years	Energy Auditing
Team Member	1	Energy Auditor	7 years	Energy Auditing
Support Staff	1	Diploma Engineer	4 years	Energy Auditing

sition for the team is given below:

Note: Necessary documents along with CVs of the officials should be provided to substantiate the claim.

3.3 DELIEVERABLES IN THE DETAIL PROJECT REPORT (DPR)

The Energy Audit Report should contain the following information:-

- Methodology adopted for the study.
- Present energy scenario of the Traction sub-station.
- Detailed analysis of the data obtained through field visits, trial measurements by portable gadgets, discussion with concerned personnel etc.
- Data collection, information related to the equipment as per the suggestive template format.

- Recommendations for energy saving options in all possible areas with cost benefit analysis (payback period)

Inception Report – This shall be prepared and submitted within 3 weeks after signing the contract. The Inception report shall include the Questionnaire/Survey forms, proposed evaluation design/plan, implementation plan and timelines.

Draft Report – This shall be submitted 10 weeks after commencing the assignment. Consultants may be requested to come and present the Draft Report to BEE to obtain their comments and suggestions to improve the quality of the work.

Final Report – This shall be submitted to BEE in 12 week time after presenting the draft report. The Final Report shall have incorporated comments and suggestions from BEE, as well as any other data not fully captured at the time of writing the draft report. The format shall be agreed with BEE after signing the contract.

3.4. TIMELINE

The Project assignment shall take a maximum of 120 calendar days effective from the date the contract is signed.

4. **PROPOSAL**

4.1 **PREPARATION OF PROPOSAL**

The proposal should be in two parts: Part A – Technical; Part B – Financial, on A-4 sized pages (Font – Times New Roman; Font Size 11 with margins set at least 2.5cm all round); should include the following:

Part A: Technical:

1. Background information that includes an interpretation and understanding of the terms of reference;
2. Methodology and approach outlining a clear conceptual and analytical framework for the audit;
3. Proposed work plan outlining clear timeframe and logical steps in conducting the assignment;
4. Profile of the consultant (s) and detailed CV;
5. Name and brief background of the consultants, including existing experience and expertise that will be of benefit to the proposed audit;
6. Names and contact information of referees for the three most recent and relevant projects.

Part B: Financial

Financial offer should only indicate price without any condition or qualification whatsoever and should include all taxes, service tax, duties, fees, levies, and other charges levied by Central & State Government/ government bodies, as may be applicable in relation to activities proposed to be carried out. If there would be any increase in the taxes, levies, duties, fee and other charges during tenure of the contract, the financial burden of the same shall be borne by the bidder. The Financial Offer in respect of the above assignment must be valid for 120 days from the date of opening of the Financial Offer. Bidders should express the price of their services in Indian currency only. **Format for financial proposal is enclosed as Annexure-1.**

4.2 **EVALUATION CRITERIA FOR REVIEW OF PROPOSAL**

Technical Proposal:

The Technical bids shall be opened as specified in the data sheet at BEE office by the Evaluation Committee. The qualification of the bidder shall be checked as per the eligibility criteria (Form 2). Technical evaluation will be done on the basis of the following criteria:

Sr No	Criteria of Assessment	Sub Total Score
1.	Experience in Energy Auditing.	40
2.	Relevant background of the consultant/firm, including existing expertise and experiences in conducting following:	
	2.1 Energy Audit in Railway Sector or Distribution Substations	10
	2.2 Energy Audit of Traction Substations in Railway Sector	10
3.	Relevant Profile of the consultant(s) and detailed CV;	20
4.	Proposed methodology and approach outlining a clear presentation and strong conceptual and analytical skills.	10
5.	Annual turn-over of the company (in INR)	10
	Total Technical Proposal Score	100

The minimum qualifying total score, for the technical bid shall be 70. The financial offers of only those bidders shall be opened who scores 70 or above during evaluation of technical offers. For those bidders whose proposals did not meet the minimum qualifying marks under technical evaluation or were considered non responsive to the terms of reference, the financial proposals will be returned unopened after completion of the selection process. The list of bidders who have successfully obtained the requisite marks under the technical evaluation criteria will be informed about the opening of the financial offers. Such selected bidders shall attend the opening of financial bids at the BEE office at the date and time notified by BEE.

Financial Proposal:

The financial proposals of the technically pre-qualified bidders will be opened by the evaluation committee at BEE. Evaluation will be done based on the total lump sum prices quoted by the bidder.

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

4.3 SUBMISSION OF PROPOSAL:

The proposal shall be typed and shall be signed by the head or a person duly authorized to bid by bidder agency. All pages of the offer, except for un-amended printed literature, shall be initialed by the person or persons signing the offer.

- a. The EMD as indicated in the data sheet shall be placed in a sealed envelope clearly marked **“EMD”**. The EMD shall be furnished in the form of DD drawn in favor of **“Bureau of Energy Efficiency”**, payable at New Delhi.
- b. Proposals from Firms should be submitted in two distinct parts, technical & financial.
- c. The original hard copy and soft copy of the complete set of Technical Proposal shall be placed in a sealed envelope clearly super scribed **“TECHNICAL PROPOSAL”**
- d. The original hard copy of the Financial Proposal (details in section 4.4)) shall be placed in a sealed envelope clearly marked as **“FINANCIAL PROPOSAL FOR GROUP “GROUPNUMBER”** and warning **"DO NOT OPEN WITH THE TECHNICAL PROPOSAL"**.
- e. In case bidder is bidding for auditing more than one Group of TSS (details in section 4.4) then he needs to submit separate financial proposal for each Group clearly marked as **“FINANCIAL PROPOSAL FOR GROUP “GROUP NUMBER”** ” and warning **"DO NOT OPEN WITH THE TECHNICAL PROPOSAL"**.
- f. All the envelopes (EMD envelope, technical proposal envelope and single/multiple no. of financial proposal envelopes) shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and should be super scribed with the wordings **“REQUEST FOR PROPOSAL FOR HIRING OF ENERGY AUDITING FIRM FOR ENERGY AUDIT WORK OF RAILWAY’S TRACTION SUB-STATIONS LOCATED AT VARIOUS PLACES ACROSS INDIA”** and shall also be clearly marked **"DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE"**.
- g. The completed Technical and Financial Proposal must be delivered at the submission address on or before the time and date stated in the data sheet. Any

proposal received after the closing time for submission of proposals will not be considered for participation.

- h. This envelope shall be sent to The Secretary, Bureau of Energy Efficiency, 4th Floor, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- i. Non-compliance to the above process will be liable to rejection

4.4 SELECTION OF THE BIDDER:

- List of Traction substations to be audited and their respective groups is enclosed as ANNEXURE-2. The Traction substations have been divided into 4 groups based on their location. Each group contains 5 Traction substations (for details refer Annexure-2)
- Each Bidder can submit his bid for any or all groups. It may be noted that in case of single bidder bidding for more than one group of TSS, contract for only one group will be assigned to that bidder i.e. for ex. if Bidder A has been awarded contract for auditing TSS under GROUP – I then his proposal for other groups will not be considered. The bids for different groups will be opened in increasing order of Group number i.e. Bids for Group - I will be opened first.
- To assist in the scrutiny, evaluation and comparison of offers, the Bureau may, as its discretion, ask some or all bidders for technical clarification/presentation of their offer. To speed up the tender process, the Bureau, at its discretion, may ask for any technical clarification to be submitted by the consultant. BEE reserves the right to analyse and alter the evaluation/selection criteria.
- On completion of the evaluation of the technical and financial offers, the Bureau shall issue Letter of Intent to the selected bidder.
- Within Ten days of receipt of the Letter of Intent, the selected bidder shall enter into a contract with the Bureau in the prescribed format. The selected bidder shall also commence the assignment within ten days of receipt of Letter of Intent from the Bureau.
- If the bidder, upon selection, fails to enter into a contract, Bureau may invite the technically qualifying consultant who has ranked second in the aggregate financial offer for the award of the contract, and may also exclude the former from all future assignments.
- BEE reserves the right to reject any or all of the bids without assigning any reason whatsoever.

5. **TERMS OF PAYMENT:**

Payments will be made as per the following schedule:

- 10% of total payment as mobilisation charges on submission of inception report.
- 30% of total payment upon submission of draft report.
- Final 60% payment upon submission of the final report.

Note: BEE shall process the payment after the receipt of the invoice at each stage. However, the work schedule shall be adhered and shall not be affected due to payment related process

Penalty for delay of deliverables: 1% per week or part of the week limited to maximum 10% of the order value

5.1 **FORCE MAJEURE**

FORCE MAJEURE shall mean and be limited to the following:

- a) War/hostilities
- b) Riot or Civil commotion
- c) Earthquake, flood, tempest, lightening or other natural physical disaster.
- d) Restrictions imposed by the Government or other statutory bodies which prevents or delays the execution of the Contract by bidder.

In the event of any force majeure cause, the bidder or the employer shall not be liable for delays in performing their obligations under this order and the completion dates may be extended, for a period not exceeding the period of delay attributable to the causes of Force Majeure. Neither Bureau (BEE) nor Bidder shall be liable to pay extra costs provided it is mutually established that Force Majeure Conditions did actually exist.

The Bidder shall at all times, Indemnify and keep indemnified, the employer and its officer's servants and agents, from and against all/any claims whatsoever, arising as a consequence of, or in the course of execution of the work (including but not limited to property loss and damage, personal accident, injury or death of or to property or person, of the Agency or any JV partner or subcontractor, and / or the servants or agents of the ENERGY AUDIT FIRMS, or any other JV partner or any sub-contractor and / or of the Bureau of Energy Efficiency).

6. GENERAL TERMS AND CONDITION

6.1. COST OF RFP

The agency shall bear all costs associated with the preparation and submission of its RFP, including cost of presentation for the purposes of clarification of the bid, if so desired by the purchaser. BEE will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

6.2. CONTENTS OF THE RFP

The agency is expected to examine all instructions, forms, terms & conditions and Statement of Work in the RFP document. Failure to furnish all information required or submission of an RFP document not substantially responsive to the RFP in every respect will be at the Consultant's risk and may result in the rejection of the proposal.

6.3. CONFLICT OF INTEREST

The agency/agencies that are selected for the work will have to maintain the confidentiality of the information compiled. In no case the agency/agencies would be allowed to use the data or share the information with anyone else, except for the BEE or Railway Board.

BEE shall hold the copyrights over any of the data collected or compiled during the course of the awards.

6.4. LANGUAGE OF BIDS

The Bids prepared by the agency and all correspondence and documents relating to the bids exchanged by the agency and the Purchaser, shall be written in the English language, provided that any printed literature furnished by the 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 bid, the English translation shall govern.

6.5. CONFIDENTIALITY

BEE require 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.

6.6. AUTHORIZED SIGNATORY (AGENCY/BIDDER)

The "agency/bidder" as used in the RFP shall mean the one who has signed the RFP document forms.

The agency should be the duly Authorized Representative of the agency, for which a certificate of authority shall 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 bid. BEE may reject outright any proposal not supported by adequate proof of the signatory's authority.

6.7. AMENDMENT OF RFP

At any time prior to the last date for receipt of bids, BEE, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective agency, modify the RFP Document by an amendment. In order to provide prospective agency reasonable time in which to take the amendment into account in preparing their bids, BEE may, at their discretion, extend the last date for the receipt of Bids and/or make other changes in the requirements set out in the Invitation for Proposals.

6.8. EARNEST MONEY DEPOSIT (EMD)

All bids must be accompanied by a EMD of INR 50,000 (INR Fifty Thousand only) in the form of a crossed demand draft drawn on any nationalized/ scheduled bank payable at par in New Delhi, in favour of “Bureau of Energy Efficiency, New Delhi” for applying for the task.

- Proposals not accompanied by EMD shall be rejected as non-responsive.
- No interest shall be payable by the Employer for the sum deposited as earnest money deposit.
- No bank guarantee will be accepted in lieu of the earnest money deposit.
- The EMD of the unsuccessful bidders would be returned back within two months of signing of the contract.

6.9. BID PROCESSING FEES

The agencies / firms should submit a bid processing fee of Rs.5,000/- (INR Five Thousand Only) at time of submission of the technical and financial proposal to BEE. 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.

6.10. CONTACT DETAILS OF THE AGENCIES / FIRMS

The agencies / firms who want to receive BEE response to queries should give their contact details to BEE. The agencies / firms should send their contact details in writing at the BEE contact address indicated under section 1.2.

6.11. POWER OF ATTORNEY

Registered Power of Attorney executed by the agency in favour of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this RFP. BEE shall not be responsible for non-receipt / non-delivery of the RFP due to any reason whatsoever.

Consultants are advised to study the RFP document carefully. Submission of proposal shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications

6.12. DISCLAIMER

BEE and/or 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.

Except where otherwise specified in the contract, the decision of BEE shall be final, conclusive and binding on all agencies to the contract upon all questions relating to the meaning of the RFP specifications, scope of work, terms & conditions etc. here in before mentioned and as to the trustworthiness of measurement & suggestions, or as to any other question, claim, right, matter, or thing whatsoever in any way arising or relating to the contract, specifications, terms & conditions, orders, or otherwise concerning the works or the execution or failure to execute the same, whether arising, during the progress of the work or after the completion or abandonment thereof.

6.13. DISQUALIFICATION

Bureau may in its sole discretion and at any time during the process of bidding, disqualify any bidder from the tender process if the bidder has –

- Submitted the tender after the schedule date and time.
- Firms not meeting eligibility criteria.
- Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements.
- If found to have a record of poor performance such as abandoning works, not properly completing the contract, inordinately delaying completion, being involved in litigation or financial failures, etc.
- Submitted proposal which is not accompanied by required bid fees.
- Failed to provide clarifications related thereto, when sought.

6.14. TERMINATION OF CONTRACT

Bureau has its rights under the conditions of this RFP to terminate the contract of the agency at any time. The contract may also be terminated if the agency's performance or competence fails to meet the standards required for the assignment.

7. RFP FORMS

The proposal is to be submitted in the following format along with the necessary documents as listed. The proposal shall be liable for rejection in the absence of requisite supporting documents.

7.1. RFP Form 1: RFP Letter Proforma

To,

The Secretary
Bureau of Energy Efficiency
4th Floor, Sewa Bhavan,
R.K. Puram,
New Delhi -110066
India

Sub: Technical Proposal for Hiring of Energy Auditing Firm for Energy audit work of Railway's Traction sub-stations located at various places across India.

Sir/ Madam,

The undersigned is the authorized representative of the (Name of Bidder), having read and examined in detail the complete RFP document in respect of selection of agency for **Energy audit work of Railway's Traction sub-stations** for BEE do hereby express their interest to provide Consultancy Services as specified in the scope of work.

7.2. Correspondence Details

Our correspondence details are:

1	Name of the Agency	
2	Address of the Agency	
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	Mobile No. &Telephone (with STD code)	
7	E-Mail of the contact person	
8	Fax No. (with STD code)	

7.3. Document forming part of RFP

We have enclosed the following:

- RFP Form 2: Eligibility and Other details
- RFP Form 3: Prior Experience
- RFP Form 4: Approach and Methodology
- RFP Form 5: Proposed Work Plan
- RFP Form 6: Resumes of the members in the proposed team.
- RFP Form 7: Declaration Letter.
- EMD of INR 50,000 (INR Fifty Thousand)
- Bid processing fees of INR 5,000/- (INR Five Thousand Only)

Registered Power of Attorney executed by the agency in favour of the Principal Officer or the duly Authorized Representative, certifying him/her as an authorized signatory for the purpose of this RFP.

(Bidder shall mention the Form No. clearly over the respective enclosure of the technical 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 Authorized Representative)

Name :
Designation :
Seal :
Date :
Place :

Business Address:

Witness:

Signature _____
Name _____
Address _____

Date _____

Signature _____
Name _____
Designation _____
Company _____
Date _____

7.4. RFP Form 2: Eligibility and Other Details

1	Name of Firm/Company *			
2	Year and Place of Registration/Incorporation			
3	Prior experience in the field of Energy Audit	Yes OR No		
	If, Yes Number of Audits done for Traction Sub Stations of Railways. (effective FY 10-11)			
	If, No Number of Projects done in Railway Sector or audit of Distribution Sub Stations (effective FY 10-11)			
4	Total Number of years of work experience in the field of Energy Auditing			
5	Number of Employees in India as on March, 2016			
		FY 2013-14	FY 2014-15	FY 2015-16
6	Annual Turnover from Consultancy Services**			
7	Annual Profits **			

* Enclose a copy of Registration document

** Enclose a copy of Audited Financial Statement

Witness:**Signature****Name****Address****Date****Consultant:****Signature****Name****Designation****Company****Date**

7.5. RFP Form 3: Prior Experience

[Please indicate the experience in the field of energy auditing (minimum requirement is 3 years) in the format provided below, mention the details of at least 1 assignment directly related to the relevant field. Firms having larger experience must furnish the details of all other similar assignments separately in the same format as provided below. Kindly Note, the bidder shall mention the details of assignments done during last 4 years only

Name of Agency/Firm:	
Assignment/job name:	
Nature of Assignment:	
Description of Project:	
Approx. value of the contract (in Rupees):	
Country:	
Location within country:	
Duration of Assignment/job (months) :	
Name of Employer:	
Address and contact details:	
Total No of staff-months of the Assignment/job:	
Approx. value of the Assignment/job provided by your firm under the contract (in Rupees):	
Start date (month/year):	
Completion date (month/year):	
Total duration (months)	
Name of associated Consultants, if any:	
No of professional staff-months provided by associated Consultants:	
Name of senior professional staff of your firm involved and functions performed.	
Description of actual Assignment/job provided by your staff within the Assignment/job:	

Note: Please attach Letter of Intent or Purchase Order or certificate of successful completion for each project, from the respective Client(s).

Witness:
Signature _____
Name _____
Address _____
Date _____

Consultant:
Signature _____
Name _____
Designation _____
Company _____
Date _____

7.6. RFP Form 4: Approach and Methodology

[Explain your understanding of the objectives of the Assignment/job, approach to the Assignment/job, methodology for carrying out the audit and obtaining the expected output, and the degree of detail of such output. You should explain the methodologies you propose to adopt].

(Maximum 4 pages)

Witness:

Signature

Name

Address

Date

Consultant:

Signature

Name

Designation

Company

Date

7.7. RFP Form 5: Proposed Work Plan including the timelines.

The work plan shall be task specific. However, the agency shall include a one page description on product understanding for each product under the respective group for which the consultant is submitting the proposal.

WORK SCHEDULE

S.No.	Activity	No. of Days
--------------	-----------------	--------------------

1.

2.

3.

4.

7.8. RFP Form 6: Resumes of the members in the proposed team.

Consultants shall submit full resumes of the team leader and members of the team proposed for the assignment, including contact information as per the following format (in max. 2 pages).

- 1) Name:
- 2) Complete Contact Information:
- 3) Proposed Position:
- 4) Educational Qualification:
- 5) Employment Record:
- 6) Relevant Work Experience / Work Undertaken that best illustrates capability to handle the proposed task:
- 7) Certification / Signature:

7.9. RFP Form 7: 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:

Signature

Name

Address

Date

Consultant:

Signature

Name

Designation

Company

Date

Annexure – 1

Format for Financial Proposal (Refer Section 4.0)

[Location, Date]

FROM: (Name of Firm)

TO: (Name and Address of Client)

Subject: Financial Proposal for Hiring of Energy Auditing Firm for Energy audit work of Railway's Traction sub-stations located at various places across India.

I / We, the undersigned, offer to provide the consulting services for the above in accordance with your Request for Proposal dated *[Date]*, with our Technical and Financial Proposals.

Our attached Financial Proposal (RFP No.) is for Hiring of Energy Auditing Firm for Energy audit work of Railway's Traction sub-stations of group (mention group number) and is for the sum of *[Amount in words and figures]*.

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:

List of Railway Traction Sub-Station

Annexure – 2

	Railway	State	Division	Location of TSS/FP	Grid supply available at TSS/FP in kV	Type-owned by Railway or SEBs	No. of existing transformer with capacity (MVA)	Contracted Maximum Demand (MVA)	Avg. Max. Demand during 2013-14 (MVA)	Avg. mthly energy consumption (2013-14) (MkWh)
Group 1	Central Railway	Maharashtra	Mumbai	Igatpuri	110	Railway	2*21.6MVA	62	64.167	28.00
	Western Railway	Maharashtra	BCT(SUB)	Mahalaxmi	110	RLY	2*30 MVA	70.00	49.44	21.48
	Central Railway	Maharashtra	Mumbai	Sion (D.C. Traction)	22	Railway	3*3280+80 KVA	25	24.925	9.57
	South Western Railway	Karnataka	Bangalore	BWT	220	SEB	2 x 20	14	11.45	2.38
	South Central Railway	AP	Vijayawada	Krishna Canal	132	Railway	1x 21.6, 1x21.6	18.00	16.39	5.95
Group 2	Eastern Railway	West Bengal	Asansol	DURGAPUR	25 kV	DVC	2 X 25	25.0	23.2	7.63
	East Central Railway	West Bengal	Dhan	Koderma/FP	25	DVC	2 x 25.0	24.5	22.96	5.98
	South Eastern Railway	West Bengal	Kharagpur	BALICHAK	132	RLY	2 X 13.5/20 (Under replacement by 2X 30/42 MVA Tr)	31.50	27.85	9.19
	Metro Railway	West Bengal	Metro Railway	CEN/RSS	33 Kv	Metro Railway	Two Nos. 33Kv/11 Kv, 16 MVA Power Transformer each RSS	13.5	11.856	3.277
	East Coast Railway	Odisha	Khurda Road	Jakhapura	132	Railway	1 x 21.6	20	18.22	5.64
Group 3	West Central Railway	MP	Bhopal	Bina (BINA)	132 kV (D/C)	Railway	30.0 & 30.0	25	26.48	8.52
	West Central Railway	MP	Jabalpur	Karaiya Bhadoli (KYX)	220 kV (D/C)	Railway	54 & 54	28	27.50	7.30
	South East Central Railway	MP	Bilaspur	Nowrajbad	220	Railway	2 x 54	30.50	29.63	7.3
	North Central Railway	MP	Jhansi	Gwalior	132	Railway	2X21.6	24	19.42	5.95
	Southern Railway	Tamil Nadu	Chennai	Avadi	110 kV	Railway	2 x 21.6	22.00	20.020	7.95
Group 4	Northern Railway	Haryana	DELHI	DWNA	132	Railway	21.6x2	30	22.32	8.55
	Northern Railway	Haryana	DELHI	BVH	66	Railway	21.6x1, 12.5x2	33	28.97	10.85
	North Central Railway	Haryana	Agra	Hodal	66	Railway	2x21.6	33	30	6.24
	North Eastern Railway	UP	Varanasi	CPR	132	Railway	2*21.6MVA	10.8	2.010	0.11
	South Eastern Railway	Jharkhand	Chakradhapur	MANIKUI	132	RLY	2 X 21.6	32.00	28.07	7.25

Annexure - 3**Details of equipment installed at Traction substation**

Ref No.	Description	Drg. No./Part No./Spec. No.	Qty in Numbers
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1	132 kV, 1250 A TP Isolators with earth blade	ETI/ PSI/122(3/89)	4
2	132 kV, 1250 A TP Isolators(for bus coupling)	ETI/ PSI/122(3/89)	1
3	132 kV, 1250 A DP Isolator	-do-	2
4	132 kV Support insulator		2
5	132 kv Current Transformer(for transformer protection)	ETI/PSI/117 (7/88)	4
6	132 kV----- Circuit Breaker (2 pole)	TI/SPC/PSI/CB/0000	2
7	120 kV Lightning Arrester	ETI/PSI/137(8/89)	4
8	13.5/21.6 MVA, 132/27 kV, Single phase power transformer with bushing CTS	ETI/PSI/118(10/93)	2
9	42 kV Lightning Arrester	ETI/PSI/71(1/87)	2
10	25 kV----- Circuit Breaker (Single pole)	TI/ SPC/ PSI/CB/0120	4
11	25 kV Current Transformer	ETI/ PSI/90(6/95)	6
12	25 kV/ 110 V potential Transformer (Protection Type)	TI/SPC/PSI/PTs/0090	2
13	25 kV 1250 A, SP Isolator	ETI/OHE/16(1/94)	2
14	25 kV support Isolator	ETI/OHE/15/9/91	12
15	10 KVA, 25 KV/240 V AUXILIARY TRANSFORMER	ETI/PSI/15 (08)/ 2003	2
16	20 KV DROP OUT FUSE SWITCH(RATED CURRENT 1 AMP)	ETI/PSI/14/1/84	2
17	25 KV INTERRUPTER----- (BUS COUPLING)	ETI/PSI/167(9/97)	1
18	25 KV, 1250 A, DP ISOLATOR	ETI/ OHE/15(1/94)	1
19	19/3.99 MM AAC SPIDER CONDUCTOR		As Req.
20	50 MM od ALUMINIUM TUBULAR BUSBAR		-do-

21	10/2.5 mm galvanized steel stranded earth wire.		-do-
22	132 kV strung bus termination arrangement style – 01.02	ETI/PSI/0/226	12.6 &4
23	earth wire termination arrangement style- 01,02 and 05	ETI/PSI/0225	3.3.4.2 &1
24	Rigid connector on HV side of 132/27 kV Transformer	11010	4
25	Expansion connector on LV side of 132/27 kV transformer	11220	4
26	Terminal connector on HV side of 10 kVA Auxiliary transformer		2
27	Terminal connector on LV side of 10 kVA and 25 kVA Auxiliary Transformer		1+1
28	Terminal connector	11120	2
29	Terminal connector on 132 kV CT (rigid type)	11010	8
30	Terminal connector on 132 kV CB (rigid type)	11030	8
31	Terminal connector on 132 kV LA	11010	4
32	Terminal connector on 42 kV LA		2
33	Terminal connector on 25 kV CT (rigid type)		6
34	Expansion connector on 25 kV CT		6
35	Terminal connector on 25 k V , drop out fuse switch		4
36	Felxible connector on 25 kV CB.	11060	8
37	Terminal connector on 132 kV, Isolator (for Zebra Conductor)	11030	38
38	Connector on 25 kV, isolators(50 mm) Al bus terminal.	11090	16
39	Expansion connector on 25 kV Isolator	11060	2

40	Connection on 25 kV Interrupter.		2
41	Rigid clamp on 25 kV support insulator	11200	16
42	50/ 25 mm aluminium bus bar terminal connector	11140	4
43	26. 62 mm Al Bus. Bar TEE connector to suite ZEBRA ACSR conductor	11040	46
44	50 mm Al. bus bar TEE connector.	11150	4
45	50 mm Al. Bus splice.	11180	As req.
46	Sliding clamp for 50 mm OD Aluminium Bus bar	11190	7
47	2 S.W.G copper wire (HDGC)		As req.
48	Terminal connector on 25 kV PT (Protection type)	Assembly of RTF Drg. No.	2
49	Aluminium CU, bimetallic strip		As req.
50	TEE connector suitable for incoming line feeder.		12
51	Post insulator jumper clamp	11050	4
52	36 mm Al. bus bar connector for 25 kV PT connection		2
53	20 mm terminal connector		4
54	Main switch Board for 100 kVA LT supply Transformer		1
55	132 kV potential transformer (accuracy Class II)	TI/ SPC/ PSI/PTs/0991	4
56	132 kV current transformer (accuracy class 2 S)		4