

# Delhi Electricity Regulatory Commission



## Terms and Conditions

For

**Appointment of Energy Auditors for Energy Audit of Distribution  
Network of New Delhi Municipal Council (NDMC)**

**May, 2017**

### Important Milestones

|                                          |                          |
|------------------------------------------|--------------------------|
| Notice inviting Tender                   | : 03/03/2017             |
| Pre-Bid Meeting                          | : 21/03/2017 at 11:00 AM |
| Last date of submission of Bid Proposals | : 19/06/2017 at 11:00 AM |
| Opening of Technical Bids                | : 19/06/2017 at 03:00 PM |

**APPOINTMENT OF ENERGY AUDITORS FOR ENERGY AUDIT OF DISTRIBUTION NETWORK OF  
New Delhi Municipal Council (NDMC)**

Delhi Electricity Regulatory Commission, Viniyamak Bhawan, C-Block, Shivalik, Malviya Nagar, New Delhi (hereinafter referred to as "DERC" or "The Commission") intends to appoint Energy Auditors (hereinafter referred to as "Consultant") for Energy Audit (hereinafter referred to as "Assignment") of Distribution Network of New Delhi Municipal Council (NDMC) (hereinafter referred to as DISCOM).

The scope of work shall involve Energy Audit of Distribution Network of NDMC for the period commencing from 1<sup>st</sup> April, 2017 up to 31<sup>st</sup> March, 2018.

The successful bidder shall hereinafter be referred to as "Successful Bidder" or "Consultant".

The list of broad activities that need to be undertaken is enclosed at Annexure A1. The list of activities as detailed at Annexure A1 is purely for the purpose of guidance and is not exhaustive. There may be some element of overlapping in the list. This list, if so required, can be discussed at the time of pre-bid meeting and suitably amplified.

The Consultant is expected to make itself fully aware of all applicable laws. An indicative list of applicable laws/ regulations is enclosed as Annexure A2.

The Consultant is also expected to critically examine the various systems schemes, devices employed as well as the associated documents at the DISCOM so as to ascertain its adequacy and efficacy and submit a report to the Commission. In the report, the consultant shall clearly bring out all inefficiencies in the Distribution Network of the DISCOM. If during the course of assignment, the Consultant comes across or identifies any area needing improvement in the efficiency, the same shall be explicitly brought out in the report.

The consultant shall be required to collect any additional information/data that may be felt necessary for completion of the task.

The Consultant shall depute its officers in offices of the DISCOM on the basis of Authorization Letter of the Commission.

The consultant shall make presentations to the Commission, from time to time, for better understanding of the task.

The following general terms and conditions shall be applicable with regard to submission of quotation for Evaluation and Award of Contract.

- 1) No Bidder shall submit more than one Bid for the Assignment. A Bidder bidding individually or as a member of a Consortium shall not be entitled to submit another bid either individually or as a member of any other Consortium, as the case may be.
- 2) Change in Consortium shall not be permitted after bid submission.
- 3) In case the Bidder is a Consortium, then the term Bidder shall include each Member of such Consortium and the members thereof, shall furnish a Power of Attorney in favour of the Lead Member in the format at Annexure A3.
- 4) A Bidder shall not have conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Bidder found to have Conflict of Interest shall be disqualified.
- 5) A Bidder shall be deemed to have a Conflict of Interest affecting the Bidding Process, if:
  - i) The Bidder, its Consortium member or Associate (or any constituent thereof) of any other Bidder, its constituent member or any Associate thereof (or any constituent thereof) have common controlling shareholders or other ownership interest;

Provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of a Bidder, its Consortium member or an Associate thereof in the other Bidder, its Consortium member or Associate, is less than 5% (five percent) of the subscribed and paid up equity share capital thereof;

Provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in sub- section (72) of section 2 of the Companies Act, 2013.

For the purposes of this Clause, indirect shareholding held through one or more intermediate persons shall be computed as follows:

- (a) Where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person ; and
- (b) Subject to sub-clause (a) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis;

Provided, however, that no such shareholding shall be reckoned under this sub-clause (b) if the shareholding of such person in the intermediary is less than 26% of the subscribed and paid up equity shareholding of such intermediary ; or

- ii) A constituent of such Bidder is also a constituent of another Bidder ;or
  - iii) Such Bidder, its Consortium member or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, its Member or any Associate thereof; or
  - iv) Such Bidder has same legal representative for purposes of this Bid as any other Bidder; or
  - v) Such Bidder, or any Associate thereof, has a relationship with another Bidder, or any Associate thereof, directly or through common third party/parties, that puts either or all of them in a position to have access to each other's information about, or to influence the Bid of either or each other; or
  - vi) There is a conflict among this and other consulting assignments of the Bidder (including its personnel and sub-consultants) and any Affiliates. While providing consultancy services to the Commission for this particular assignment, the Bidder shall not take up any assignment that by its nature shall result in conflict with the present assignment.
  - vii) For purposes of this Bid, Associate in relation to the Bidder shall mean a person who controls, is controlled by, or is under the common control with such Bidder. As used in this definition, the expression "control" means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50 percent of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person by operation of law or by contract.
- 6) Bid shall be submitted in a sealed envelope super-scribing on the top of the Envelope *"Appointment of Energy Auditors for Audit of Distribution Network of New Delhi Municipal Council (NDMC)"* containing the following in separate sealed envelopes, duly super-scribing its contents:
- (a) Earnest Money Deposit (EMD) of Rs. 10,000/- (Rupees ten thousand only) in the form of a Pay Order/Demand Draft in favour of "The Secretary, DERC", payable at New Delhi, in a separate sealed envelope,
  - (b) Technical Bid in a separate sealed envelope,
  - (c) Financial Bid in a separate sealed envelope.

- 7) Each page of the bid shall be numbered and signed by the Authorized Signatory with the seal of the Bidder and the forwarding letter must indicate the details of the enclosures.
- 8) The Bidder shall authorize one person as Authorized Signatory through Power of Attorney duly notarised by the Notary Public on a non judicial stamp paper of Rs. 100/- indicating that the person signing the bid has the authority to sign the bid/ enter the contract with the Commission and that the bid/ contract is binding upon the Bidder during the full period of its validity, shall be submitted.
- 9) In the event of any change in the Authorized Signatory during any stage of the bid process, the Bidder shall furnish the fresh Power of Attorney indicating the new Authorized Signatory for the purpose of the assignment.
- 10) The Bidder shall submit the bid in triplicate, comprising one set of the Original Bid and two sets of its copies, marked as Copy -1 and Copy -2.
- 11) Each bidder shall submit period of validity of the bid document, which shall not be less than 180 days from the last date of the bid submission.
- 12) The tender document can be either downloaded from the Commission's website (<http://www.derc.gov.in>) or can be obtained from the Commission's office.
- 13) In case, any information/clarification is required in respect of Bid, the authorized representatives of the bidder may visit DERC Office during Pre-Bid meeting/forward their queries before the scheduled date and time of pre-bid meeting.
- 14) Bids received after the scheduled date and time of Bid submission shall not be accepted and DERC shall not be responsible for any postal delay.
- 15) The envelope containing EMD shall be opened first and the envelope containing Technical bid shall be opened only for those bidders whose EMD is found to be in order. Any bid not accompanied by EMD in accordance with the above stipulation shall be summarily rejected as being non-responsive.
- 16) For the purpose of qualification under the Technical Bid, the bidders may be called for presentation.
- 17) Only those Bidders who qualify in the Technical Bid shall be intimated for attending the opening of the Financial Bids.
- 18) The Bidder shall quote its rates on lump-sum basis:

- a) Exclusive of applicable taxes, but inclusive of all other expenses along with detailed profile and past experience of the bidder provided at Annexure B of the bidder.
  - b) No TA/DA shall be admissible for the Bidder for any journey in connection with the assignment.
- 19) DERC reserves the right to replace the Bidder, after its appointment and re award the job if it is found that the reporting / certification being submitted (in phases) are not of desired standard.
- 20) EMD of the successful bidder(s) shall be returned to them after submission of the Performance Bank Guarantee.
- 21) The Bid Schedule shall be as under:

| Sl. No. | Activity                                 | Date       |
|---------|------------------------------------------|------------|
| 1       | Notice inviting Tender                   | 03.03.2017 |
| 2       | Pre-Bid Meeting with prospective bidders | 21.03.2017 |
| 3       | Last Date of Receipt of Bid Proposals    | 19.06.2017 |
| 4       | Opening of Technical Bids                | 19.06.2017 |

- 22) No overwriting / cutting shall be allowed in the financial bid proposal. Further, no modification in the bid shall be entertained /permitted after the submission of the bid. In case of any mismatch in the financial quote between quote in numbers and quote in words, quote in words shall prevail.

**Method of Selection:** Quality & Cost Based System (QCBS)

- 23) Criterion for Technical evaluation:

- a) Audit Methodology and Organisation Experience - 30 (Thirty) Marks

- i) Methodology - 20 (Twenty) Marks

The Bidder shall explain their understanding of the objectives of the Assignment/job, approach to the Assignment/job, methodology for carrying out the activities and obtaining the expected output. They shall highlight the issues being addressed and their importance, and explain the technical approach they would adopt to address them. They shall also explain the methodologies proposed to adopt and highlight the compatibility of those methodologies with the proposed approach.

- ii) Experience - 10 (Ten) Marks

The bidder who has maximum experience in Energy Audit of Distribution Network System shall be awarded full 10 marks and for others, the marks shall be inversely pro-rated.

b) Work Plan - 15 (Fifteen) Marks

The proposed work plan shall be consistent with the technical approach and methodology, showing understanding of the Terms of Reference (TOR) and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, shall be included here. The work plan shall be consistent with the Work Schedule indicating Week wise and Activity wise flow of the assignment with key professionals.

c) Manpower - 55 (Fifty Five) Marks

The Bidder shall propose and justify the structure and composition of their team indicating the key professional responsible, proposed technical and support staff. The method to be followed for evaluation of the key professionals shall be:

- i. Educational Qualifications and
- ii. Experience (i.e. experience in carrying out similar assignments).

The Bidder shall propose at least the following key professional for the assignment. Any overlapping of key professionals for this assignment with any other assignment of the Commission during the period of this assignment shall attract rejection of the bid:

| Particular                                                                                                                 | Minimum No. of Key Professional | Marks (Max/ Min) | Remarks                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------|
| Team Leader –<br>BEE Certified Energy Auditor (EA) with minimum 10 years of relevant experience                            | 1                               | 10/Nil           |                                                                                                                          |
| Team Members -<br>BEE Certified Energy Auditor (EA) / Energy Manager (EM) with minimum 5 years of relevant work experience | 2                               | 15/5             | Bidder who proposes highest no. shall get maximum marks. Others shall get marks inversely prorated of the maximum marks. |
| Team Members -<br>Electrical Engineer with minimum 5 years of relevant work experience                                     | 2                               | 15/5             | Bidder who proposes highest no. shall get maximum marks. Others shall get marks inversely prorated of the maximum marks. |

|                                                                                              |      |                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total Maximum Marks- (T1)                                                                    | 40   |                                                                                                                                                                            |
| Experience of Team Leader                                                                    |      |                                                                                                                                                                            |
| Team Leader - BEE Certified Energy Auditor (EA) with minimum 10 years of relevant experience | 15/5 | Bidder who proposes Team Leader with maximum relevant experience (above 10 years) shall get maximum marks. Others shall get marks inversely prorated of the maximum marks. |
| Total Maximum Marks- (T2)                                                                    | 15   |                                                                                                                                                                            |
| Grand Total Maximum Marks- (T1 +T2)                                                          | 55   |                                                                                                                                                                            |

- d) Presentation to the Commission – After opening of the Technical Bid, Bidders shall deliver a presentation to the Commission based on their credentials in support of the points above viz. Technical Approach & Methodology, Work Plan and Organization & Staffing.
- 24) The minimum qualifying total score, for the technical bid shall be 70.
- 25) After completion of the technical evaluation, the Commission shall inform the Bidders, who shall secure the minimum qualifying mark and found technically qualified.
- 26) The financial proposal of bidders other than technically qualified bidders shall be returned un-opened after completion of the Technical evaluation process.
- 27) The list of bidders whose offers have been selected after technical evaluation shall also be displayed at the website Commission.
- 28) The financial bids of only the technically qualified bidders shall be opened and such bidders or their authorized representatives may attend the opening of financial bids at DERC.
- 29) Financial Evaluation:  
The proposal with lowest quoted cost shall be given a financial score of 100 and financial scores for other bidders shall be inversely prorated.
- 30) Final Evaluation:  
Final Evaluation of the bids shall entail selection of Bidder after adding scores of Technical and Financial proposals with respective weight-age, which shall be 70% for Technical bid and 30% for Financial bid.
- 31) The Commission shall select the bidder with the highest score obtained in the final evaluation. The Successful Bidder shall be intimated by the Commission and the same shall be updated on the website of the Commission.

- 32) The Commission reserves the right to award the total assignment or reject any bid without assigning any reasons for the same.
- 33) Failure to provide all information or conceal any information material to award of contract shall be at bidder's own risk and may result into rejection of the bid or contract, as the case may be.
- 34) The successful bidder shall sign and execute the Contract within 7 working days of date of issue of Letter of Award, at the office of the Commission. Non fulfillment of this condition, would constitute sufficient ground for annulment of the award and forfeiture of Earnest Money Deposit;

Provided that the Commission in its discretionary power, on a specific request by the successful bidder, may relax this condition with the reasons to be recorded in writing;

- 35) The successful bidder shall furnish the following within 1 (one) week of signing the contract:
  - a) "Performance Bank Guarantee" equal to 10% (Ten Percent) of the value of Contract.
  - b) "Advance Bank Guarantee" equal to 110% (One Hundred and Ten Percent) of the value of Mobilization Advance.Both of the above referred Bank Guarantees shall be valid up to 3 (three) months after the completion of the assignment.
- 36) In case, the successful bidder fails to furnish the "Performance Bank Guarantee" of required value within stipulated time period, the Commission reserves the right to terminate the Contract.
- 37) In the event of annulment of award / termination of contract as indicated at Para 34 & Para 36 above, the Commission shall reserve the right to either award the contract for carrying out the assignment to the Bidder who has obtained the second highest score on consideration of Financial and Technical bids or invite fresh bids.
- 38) The Commission may hold a kick off meeting with the successful bidder to discuss the detailed work plan.
- 39) The Commission may hold review meetings with the Successful Bidder, if so required, during the course of the assignment, during which key personnel of the Successful Bidder shall be present.
- 40) The Successful Bidder shall be duty bound to hand over the entire records of assignment to the Commission before the expiry of the contract and shall not utilize or publish or disclose or part with any statistics, data or information collected for the purpose of assignment, in any form, without written consent of the Commission.

- 41) The successful bidder shall give a Certificate of Compliance for all its statutory obligations.
- 42) The bids shall be sent by post or deposited in Tender Box available at Reception of DERC up to the scheduled date and time of submission of bids at the following address duly marked:

The Secretary,  
Delhi Electricity Regulatory Commission,  
Viniyamak Bhawan,  
C-Block, Shivalik, Malviya Nagar,  
New Delhi – 110 017.  
Telefax: 011-26673608,  
E-mail: secyderc@nic.in

- 43) DERC reserves the right to accept or reject any or all the bids without assigning any reason.
- 44) The Report shall be submitted by the Successful Bidder to the Commission within 2 (Two) months from the last date of period of Audit.
- 45) Successful Bidder shall be paid as follows:
- a) For Audit Fees Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only)
  - b) Reimbursement of applicable Taxes to be indicated by the Consultant- Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only)
  - c) Total Charges of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only)
- 46) Milestones for payment shall be as follows:

| Sl. No. | Milestone                                                                                                                 | % of contract value |
|---------|---------------------------------------------------------------------------------------------------------------------------|---------------------|
| A.      | Mobilization Advance against Bank Guarantee of 110% of the Advance amount                                                 | 5%                  |
| B       | Submission of Draft Report on satisfactory completion of Energy Audit of network based on interaction with the Commission |                     |
|         | (a) Above 11 KV                                                                                                           | 10%                 |
|         | (b) At 11 KV                                                                                                              | 15%                 |
|         | (c) Below 11 KV                                                                                                           | 40%                 |
| C       | Submission of consolidated Final Report and acceptance by the Commission                                                  | 30%                 |

- 47) The payment of fee to Successful Bidder shall be processed by the Commission after the deduction of applicable tax at source.

**PROPOSAL SUBMISSION FORM**

To,  
The Secretary,  
Delhi Electricity Regulatory Commission  
Viniyamak Bhawan,  
C-Block, Shivalik,  
Malviya Nagar,  
New Delhi – 110 017

Sir/Madam,

We, the undersigned, offer to provide the services for undertaking the assignments relating to \_\_\_\_\_ in accordance with your bid document ref. \_\_\_\_\_ dtd. \_\_\_\_.

We are hereby submitting our proposal for undertaking the assignment in one Original and two copies marked as “Original” and “Copy no.-1” and “Copy no.-2” respectively in the prescribed formats, which includes the Technical Proposal and the Financial Proposal sealed under separate envelopes. Each page of the proposal has been numbered and signed by the Authorized Signatory.

A Power of Attorney duly notarised by the Notary Public, indicating that the person(s) signing the bid has the authority to sign the bid and that the bid is binding upon the Bidder during the full period of its validity is enclosed.

It is also confirmed that presently we are not handling any assignment that would be in conflict with this assignment or place us in a position of not being able to carry out this assignment objectively and impartially.

Demand drafts/pay orders no. \_\_\_\_\_ dated \_\_\_\_\_ for Rs. 10,000/- (Rupees ten thousand only) as EMD, in favour of Secretary, DERC payable at New Delhi is enclosed herewith.

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

Yours sincerely,

Authorized Signatory:  
Name and Title of Signatory:  
Name of the Bidder:

Encl. As above

**1) Key objectives of the Audit:**

- I. Assessment of the complete electrical distribution system like Single Line Diagram (SLD), Substation Equipments, Transformer, cable loading, Feeder wise loading, normal and emergency loads, electricity distribution in various areas.
- II. Assessment of feeder wise connected load at various voltage levels, billing (with break up) done at each voltage level.
- III. Assessment of feeder wise losses and suggesting the methods to minimize the same.
- IV. Assessment of quality of electrical safety and protective systems like Main switches, MCCBs, MCBs, ELCBs/RCBs, Isolators etc.
- V. Study of power quality issues like power factors, voltage, currents, active powers, reactive powers, apparent powers, Total Harmonic Distortion (THD) & Harmonics at various load feeders and consequently exploring the solution for improving the power quality.
- VI. Study of Reactive Power Management and option for power factor improvement.
- VII. Collection of inventory data of all connected load including Capacitors to be recorded showing details on rated wattage per kW, operating hours/ Peak load on daily basis.
- VIII. Load unbalance with respect to voltage and current shall be checked.
- IX. Assessment of adequacy of tests being conducted by DISCOMs as per the relevant standards, analysis of results of tests conducted by DISCOMs in FY 2016-17 as per the relevant standards and recommending the need of any additional tests/ change the frequency of tests to be conducted.
- X. Exploration the Energy Conservation Option (ENCON) in electrical distribution system to optimize transformer loading & improving in level metering.

**2) List of activities required to be under taken:**

The major activities to be covered in Scope of Work would involve the following for the period 1<sup>st</sup> April, 2017 up to 31<sup>st</sup> March, 2018.

- I. Visiting the field (Distribution Network area of the DISCOM) and recording the data by competent Engineer.
- II. Installation Audit
  - A. System & Human Safety
  - B. Capacity Utilization
  - C. Interchangeability, expandability & scope for retrofits and improvement modifications.
  - D. Maintenance Practices for equipment/system & records.

### III. Energy Audit

#### A. Bench marking of energy consumption

#### B. Establishing/Certification of distribution losses of the Distribution Network area

- i. Certification of electrical boundary vis-à-vis the physical boundary of Distribution Network area as provided by distribution utility to successful bidder post award of contract, so as to certify location of import/export. The consultant shall certify the same through physical verification and site visits of all import/export locations for Assignment area/town.
- ii. Certification of installation of export/import energy meters at following locations (The utility shall provide nodal diagram of all energy input and output points of the Distribution Network area along with necessary details to the Consultant) to ascertain the ring fencing of Distribution Network area:

- a) at energy purchase points of utility.
- b) at incoming lines of 132/66/33/11 kV Sub-stations of Distribution Network area
- c) at 11 kV feeders emanating from the 66/33/11 kV Sub-stations of Distribution Network
- d) at Distribution Network area boundary if 11 kV lines are supplying/receiving power for Distribution Network.
- e) at 66/33 kV feeders emanating on bifurcation or directly from outside/within Distribution Network and feeding to 66/33 kV HT consumers (if any) of Distribution Network area.
- f) on 33 kV or 11 kV lines bifurcation points if separately feeding to Distribution Network area.

The consultant shall certify the above ring-fencing through physical verification and site visits of all import/export metering locations for Distribution Network area.

- iii. Boundary Metering:- Verification of installation/replacement/testing reports (as per IS standards and regulatory guidelines) of energy metering equipment for information including Date of installation, meters sealing & integrity of the sealing mechanism, Initial Reading, Multiplying Factor, Measurement Error, CT/PT Ratio, etc. The consultant shall check the same through physical verification of metering sites vis-à-vis the parameters provided above, without performing any testing/calibration.
- iv. Certification of input energy of Distribution Network area of three billing cycle period. The consultant shall certify the above information on 100% basis for each import/export metering locations for Distribution Network area, on receipt of input data from the Utility.
- v. Verification of energy sales (metered and unmetered) in the Distribution Network area as provided by utility.
- vi. Verification of distribution losses for each of the Distribution Network area.

#### C. The sample size for the purpose of Energy Audit shall be as follows:

- a. Above 11 kV Level – 50%
- b. 11 kV Level – 50%
- c. Below 11 kV Level – 50%

## Deliverables

| SL. No. | Task                                                                              | Deliverable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Establishing/Verification of distribution losses of the Distribution Network area | <p>A detailed report providing the information on:-</p> <ul style="list-style-type: none"><li>• Installation, accuracy of meters on feeders, import/export points</li><li>• Validity of data for energy sales, revenue billed, collection</li><li>• Methodology followed for assessment of energy sales for unmetered consumers</li><li>• Validation of distribution Loss figures as established by the utility</li><li>• Conclusion, deviations and recommendations for corrective action</li></ul> |

D. Energy conservation and saving.

E. Evaluating energy efficient alternatives.

F. Recommendations for alternatives with relevant Payback period calculations.

### IV. Power Quality Analysis

A. Power quality measurement.

B. Identify and differentiate internal problems from those due to power quality.

C. Suggest corrective measures.

V. Suggestion on Corrective measures necessary towards reduction of feeder wise losses, electrical fire & safety measures, Upgradation in the electrical system etc.

### VI. Submission of Comprehensive Report

3) The scope includes arranging all required tools and tackles, measuring instruments, data loggers, wires & cables and technicians required for completion of the scope of work.

4) Any other services connected with the works usually and normally rendered by the Electrical Audit & Energy Management Service Company, but not referred to herein above.

Indicative List of Applicable Act, Regulations, Policies and Scheme etc.

- a) PAT Scheme
- b) Energy Conservation Act, 2001
- c) Electricity Act, 2003
- d) National Tariff Policy
- e) Delhi Electricity Supply Code & Performance Standards Regulations 2007
- f) Delhi Electricity Supply Code and Performance Standards (Amendment) Regulations, 2015
- g) Multi Year Tariff Regulations 2011 for Generation, Transmission and Distribution
- h) State Grid Code Regulations, 2008 and Amendments
- i) Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014
- j) Delhi Electricity Regulatory Commission (Demand Side Management) Regulations, 2014
- k) Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001
- l) Delhi Electricity Regulatory Commission (terms and conditions for Open Access) Regulations, 2005 and Amendments
- m) Applicable Tariff Orders issued by the Commission
- n) Specific regulatory orders issued by the Commission from time to time.

**Power of Attorney for Lead Member of Consortium**

Whereas the .....(the “Authority”) has invited bids from pre-qualified and short-listed parties for the .....Assignment (the “Assignment”).

Whereas, ....., .....and  
.....

(collectively the “Consortium”) being Members of the Consortium are interested in bidding for the Assignment in accordance with the terms and conditions of the Request for proposals and other connected documents in respect of the Assignment, and

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium’s bid for the Assignment and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We,.....having our registered office at .....M/s..... having our registered office at ....., (hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s ....., having its registered office at ....., being one of the Members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (herein referred to as the “Attorney”) and hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the Concession/Contract, during the execution of the Assignment, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its bid for the Assignment, including but not limited to signing and submission of all applications, bids and other documents and writing, accept the Letter of Award, participate in bidder’s and other conferences, respond to queries, submit

information/documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and generally to represent the Consortium in all its dealings with the Authority, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium bid for the Assignment and/or upon award thereof till the Contract is entered into with the Authority.

And hereby agree to ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the power hereby conferred shall and shall always be deemed to have been done by us/Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS.....DAY OF ...20.....

For.....  
(Signature, Name & Title)

For.....  
(Signature, Name & Title)

For.....  
(Signature, Name & Title)

(Executants)  
(To be executed by all the members of the Consortium)

Witness:

1.

2.

Notes:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the

executants(s) and when it is required, the same should be under common seal affixed in accordance with the required procedure.

- Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders resolution/power of attorney in favour of the person execution this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.
- For a power of Attorney executed and issued overseas, the document shall also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Appostille certificate.

**Annexure B**

| TECHNICAL BID |                                                                                                                        |         |
|---------------|------------------------------------------------------------------------------------------------------------------------|---------|
| Sl. No.       | Particular                                                                                                             | Details |
| 1             | Name of the bidder                                                                                                     |         |
| 2             | Single Firm/Consortium, details to be provided (copy to be attached)                                                   |         |
| 3             | Bidder Registration No. (copy to be attached)                                                                          |         |
| 4             | Pan No. (copy to be attached)                                                                                          |         |
| 5             | Service Tax Registration No. (copy to be attached)                                                                     |         |
| 6             | TIN No. (copy to be attached)                                                                                          |         |
| 7             | Address of the Bidder (Head Office/Registered Office)                                                                  |         |
| 8             | Phone No. & Fax No.                                                                                                    |         |
| 9             | Year of Establishment of the Bidder                                                                                    |         |
| 10            | No. of Partners                                                                                                        |         |
| 11            | Name of Partners & membership no.                                                                                      |         |
| 12            | No. of Employees Regular                                                                                               |         |
| 13            | No. of Bureau of Energy Efficiency (BEE) certified Energy Auditors (EA)                                                |         |
| 14            | No. of Bureau of Energy Efficiency (BEE) certified Energy Managers (EM)                                                |         |
| 15            | No. of Electrical Engineers                                                                                            |         |
| 16            | No. of Companies for which Energy Audit was carried out (list of be given as separate annexure along with credentials) |         |
| 17            | No. of Power Distribution Companies/ Networks , if any, for which Energy Audit has been carried out                    |         |

|               | (Name to be given as separate annexure along with credentials)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------|-----------------------|-------------|-------|-------|---------------|-------|-------|---------------|-------|-------|---------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 18            | <p>Name of person responsible for DERC assignment and his /her team</p> <p>(with academic qualification &amp; experience):</p> <p>_____</p> <p>_____</p> <table border="1"> <thead> <tr> <th>Particulars</th> <th>Educational Qualification</th> <th>Experience (In years)</th> </tr> </thead> <tbody> <tr> <td>Team Leader</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>Team Member-1</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>Team Member-2</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>Team Member-3</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table> | Particulars           | Educational Qualification | Experience (In years) | Team Leader | ..... | ..... | Team Member-1 | ..... | ..... | Team Member-2 | ..... | ..... | Team Member-3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |
| Particulars   | Educational Qualification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Experience (In years) |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| Team Leader   | .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | .....                 |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| Team Member-1 | .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | .....                 |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| Team Member-2 | .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | .....                 |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| Team Member-3 | .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | .....                 |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| .....         | .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | .....                 |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| .....         | .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | .....                 |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| 19            | Estimated time for completion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |
| 20            | Any other information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |                           |                       |             |       |       |               |       |       |               |       |       |               |       |       |       |       |       |       |       |       |  |

Name & Signature of the Authorized Person  
(Stamp)

**Annexure C**

**FINANCIAL BID**

Name of the Bidder:

| Sl. No. | Particular                                        | Amount (in Rs) | Amount (in Words) |
|---------|---------------------------------------------------|----------------|-------------------|
| 1       | TOTAL BID AMOUNT (in Rs.)<br>(Exclusive of taxes) |                |                   |
| 2       | Taxes, if any (in Rs.)                            |                |                   |

Name & Signature of the Authorized Person

(Stamp)

(Contract to be signed by Consultant with DERC)

This ARTICLES OF CONTRACT made on this ..... day of .....2017

**BETWEEN:**

Delhi Electricity Regulatory Commission a statutory Body set up by the Government of NCT of Delhi under the Delhi Electricity Reforms Act, 2000 and having its office at Viniyamak Bhawan, C-Block, Shivalik, Near Malviya Nagar, New Delhi – 110 017, hereinafter referred to as the “Commission”) (which expression shall unless excluded by or repugnant to the context or meaning thereof, includes its successors and permitted assigns) of the FIRST PART

AND

\_\_\_\_\_ Company registered under the Companies Act, 1956 and having its office at, \_\_\_\_\_ hereinafter referred to as the \_\_\_\_\_ Consultant (which expression shall unless excluded or repugnant to the context or meaning thereof include its successors and permitted assigns) of the SECOND PART.

(The Commission and the \_\_\_\_\_ are individually referred to as the “Party” and collectively as the “parties”).

WHEREAS the Commission has awarded the contract on the basis of open bids to the party of the SECOND PART as a Consultant for Appointment for Energy Audit of Distribution Network New Delhi Municipal Council (NDMC) more precisely explained in the ‘Terms of Reference’ contained in the bid document dated \_\_\_\_\_”.

M/s \_\_\_\_\_ have agreed to provide services to the Commission on the terms and conditions hereinafter contained.

NOW Parties to these Present hereby agree as follows:

1. M/s \_\_\_\_\_ is hereby appointed as the Consultant for the aforementioned assignment. The Consultant shall commence the assignment from zero date, which is hereby mutually agreed between the Commission and the Consultant as \_\_\_\_\_.
2. The Consultant shall record live data and utilize the same for the analyses for the period starting from the date of Award till the end of Audit Period and shall submit the Audit Report within 2 (two) months of completion of the Audit period.

3. The Consultant shall execute and complete the assignment as per the work plan and activity schedule mentioned herein.

#### **WORK PLAN AND ACTIVITY SCHEDULE**

| Sl. No. | Description                                                                              | Time (No. of Days) |
|---------|------------------------------------------------------------------------------------------|--------------------|
| 1       | Placement of officers of the Consultant at DISCOM's Office/<br>Distribution Network Area |                    |
| 2       | Submission of Draft Report to Commission                                                 |                    |
| 3       | Presentation to the Commission                                                           |                    |
| 4       | Submission of Final Report to the Commission                                             |                    |

#### **SCOPE OF WORK:**

4. The Scope of Work shall be primarily governed by the following Act, Regulations, Policies and Scheme etc.:
  - a) Applicable provisions of present PAT Scheme
  - b) Energy Conservation Act, 2001
  - c) Electricity Act, 2003
  - d) National Tariff Policy
  - e) Delhi Electricity Supply Code & Performance Standards Regulations 2007
  - f) Delhi Electricity Supply Code and Performance Standards (Amendment) Regulations, 2015
  - g) Multi Year Tariff Regulations 2011 for Generation, Transmission and Distribution
  - h) State Grid Code Regulations, 2008 and Amendments
  - i) Delhi Electricity Regulatory Commission (Net Metering for Renewable Energy) Regulations, 2014
  - j) Delhi Electricity Regulatory Commission (Demand Side Management) Regulations, 2014
  - k) Delhi Electricity Regulatory Commission Comprehensive (Conduct of Business) Regulations, 2001
  - l) Delhi Electricity Regulatory Commission (terms and conditions for Open Access) Regulations, 2005 and Amendments
  - m) Applicable Tariff Orders issued by the Commission.
  - n) Specific regulatory orders issued by the Commission from time to time.

5. Key objectives of the Audit:

- I. Assessment of the complete electrical distribution system like Single Line Diagram (SLD), Substation Equipments, Transformer, cable loading, Feeder wise loading, normal and emergency loads, electricity distribution in various areas.
  - II. Assessment of feeder wise connected load at various voltage levels, billing (with break up) done at each voltage level.
  - III. Assessment of feeder wise losses and suggesting the methods to minimize the same.
  - IV. Assessment of quality of electrical safety and protective systems like Main switches, MCCBs, MCBs, ELCBs/RCBs, Isolators etc.
  - V. Study of power quality issues like power factors, voltage, currents, active powers, reactive powers, apparent powers, Total Harmonic Distortion (THD) & Harmonics at various load feeders and consequently exploring the solution for improving the power quality
  - VI. Study of Reactive Power Management and option for power factor improvement
  - VII. Collection of inventory data of all connected load including Capacitors to be recorded showing details on rated wattage per kW, operating hours/ Peak load on daily basis.
  - VIII. Load unbalance with respect to voltage and current shall be checked.
  - IX. Assessment of adequacy of tests being conducted by DISCOMs as per the relevant standards, analysis of results of tests conducted by DISCOMs in FY 2016-17 as per the relevant standards and recommending need of any additional tests/ change the frequency of tests to be conducted.
  - X. Exploration the Energy Conservation Option (ENCON) in electrical distribution system to optimize transformer loading & improving in level metering
6. The activities to be carried out shall be as per the detailed indicative list given under Annexure A1 of the TOR for the Energy Audit.
7. The scope includes arranging all required tools and tackles, measuring instruments, data loggers, wires & cables and technicians required for completion of the scope of work.
8. Any other services connected with the works usually and normally rendered by the Electrical Audit & Energy Management Service Company, but not referred to herein above.
9. The comprehensive report shall be based on the study of the work covered under the scope of work.
10. The Consultant shall assume full responsibility for supervision and proper execution of works covered under the scope of contract.
11. The Consultant shall deploy a full time/temporary Site Engineer for supervision of work under scope of contract.

12. The supervising staff deployed by the Consultant shall maintain Daily Progress Report, Hindrance Register, etc.

13. The work shall be executed in through professional way & in true workmanship. The work shall be carried out without hampering / disturbing day to day functioning of the DISCOM.

**Other Issues:**

14. The above description of scope of work is purely indicative and not exhaustive. Changes/additions can be made by DERC as and when required for better understanding the task, and also on the feedback of the Consultant from time to time to enhance the value of the study, without changing its basic nature.

15. The Consultant agrees and undertakes that the respective tasks shall be performed & completed only by the authorized personnel and that if any change in the composition of the team is necessitated, the CONSULTANT (second party) shall seek prior permission of the Commission to effect the changes.

16. Consultant shall be paid as follows:

a) For Services Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only)

b) Reimbursement of applicable Taxes to be indicated by the Consultant Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only)

c) Total Charges of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only)

17. Milestones for payment shall be as follows:

| Sl. No. | Milestone                                                                                                                 | % of contract value |
|---------|---------------------------------------------------------------------------------------------------------------------------|---------------------|
| A.      | Mobilization Advance against Bank Guarantee of 110% of the Advance amount                                                 | 5%                  |
| B       | Submission of Draft Report on satisfactory completion of Energy Audit of network based on interaction with the Commission |                     |
|         | (a) Above 11 KV                                                                                                           | 10%                 |
|         | (b) At 11 KV                                                                                                              | 15%                 |
|         | (c) Below 11 KV                                                                                                           | 40%                 |
| C       | Submission of consolidated Final Report and acceptance by the Commission                                                  | 30%                 |

18. The payment of fee to Consultant shall be made by the Commission after the deduction of applicable tax at source.
19. The Consultant shall within one week of signing of this contract provide performance security by way of Bank Guarantee from a Scheduled Bank for an amount equal to 10% (Ten Percent) of the total contract value and security against Mobilization Advance by way of Bank Guarantee from a Scheduled Bank for an amount equal 110% (One Hundred and Ten Percent) of the value of Mobilization Advance, in formats acceptable to the Commission, which shall be valid upto period of 3 (three) months beyond the completion date. The said Bank Guarantees shall be extendable suitably in case of extension of period of contract.
20. The Commission shall be entitled to evaluate the interim reports submitted by the Consultant in stages and the Consultant shall incorporate / restructure the report/ and auditor's finding as per the recommendations of the Commission within such reasonable time as may be prescribed by the Commission.
21. The Commission shall make payments to the Consultant within 30 days of the date of receipt of Invoice for the individual milestone complete in all respects, in the Commission's office subject to acceptance of deliverables wherever required unless prevented by reasons beyond its control and in the latter case, the Consultant shall not be entitled to claim any interest or damages on account of such delay.
22. The Consultant shall be liable to the Commission for the performance of its obligations in this Contract as a result of any default of the Consultant except the following limitations:
  - a) The Consultant shall not be liable for any damage or injury caused by or arising out of the act, omission, neglect or default of any person other than the Consultant.
  - b) The Consultant shall not be liable for any loss or damage caused by or arising out of circumstances over which the Consultant has no control.
  - c) The total liability of the Consultant under this clause shall be limited to 10% of the charges mentioned in Clause 16 except for gross negligence or any damage on account of the Consultant, for which the Consultant shall be fully liable.
  - d) It is mutually agreed between the parties that the time shall be the essence of this CONTRACT. The Consultant, (the party of the second part,) shall adhere to the time schedule as prescribed in this CONTRACT and complete the work within the stipulated time frame, failing which the party of the second part would be liable for a penalty which may go upto Rs. 5000/- per day, subject to a maximum of 10% of entire value of contract, for each day of delay beyond the time stipulated in this CONTRACT, provided

that each day of delay beyond time schedule is attributable solely to the CONSULTANT. The Commission's decision in this matter shall be binding on all parties.

23. No TA/DA shall be admissible for the Consultant for local journey in connection with the assignment.
24. The Commission reserves its right to amend, foreclose, terminate or cancel the engagement of the Consultant without assigning any reasons. In such cases Consultant shall be paid remuneration 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 Commission, and the decision of the Commission shall be conclusive and binding. The remuneration so fixed and paid shall be deemed to be the final payment in such cases.
25. Any information of confidential nature, which may be so marked by the Commission, which comes to the knowledge or in the possession of the Consultant or of any of its employees by virtue of their engagement on subject matter of this contract; shall not be disclosed by the Consultant or its employees to any unauthorized person in any manner. Any breach of this clause without prejudice to any other action that may be initiated as per law, shall also subject the Consultant to a liability to pay to the Commission such compensation for damages as may be decided by the Commission keeping in view the nature, manner and motive of the information disclosed and the extent of the damage caused by such unauthorized disclosure.

Provided that any information that was (a) rightfully already known to Consultant at the time of its disclosure, (b) independently developed by Consultant without referring to the Commission's confidential information, (c) known to the public through a source other than Consultant, or (d) disclosed to Consultant by a third party not having an obligation of non disclosure to the proprietor of the information, shall not be deemed to be confidential information for the purposes of this contract.

Provided further that the obligation of confidentiality on Consultant shall not apply where such confidential information is required to be disclosed under any law.

26. The Consultant undertakes that they are not handling any assignment that would be in conflict with this assignment or place them in a position of not being able to carry out this assignment objectively and impartially.
27. In case the Consultant fails to fulfill its obligations, the Commission would be entitled to invoke the Performance Bank Guarantee furnished by the Consultant and the amount mentioned in the Performance Bank Guarantee shall stand forfeited.
28. In respect of any matter for which no provision has been made in this contract, the provisions contained in the Delhi Electricity Regulatory Commission (Appointment of Consultants) Regulations, 2001, shall apply.

29. In case of any differences or disputes between the parties arising out of this CONTRACT, the matter shall be referred to the sole arbitrator nominated by the Chairperson of the Commission, in accordance with the provisions of the Arbitration and Conciliation Act, 1996.

IN WITNESS WHEREOF the Consultant and Secretary to the Commission on behalf of the Commission have hereto put their hands on the day and the year first above written.

(       )  
Authorised Signatory  
Consultant

(       )  
Secretary  
DERC

Witness:

1.

2.