|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Opportunity Evaluation Matrix** | | | | | | | | | | |
| **Client** | | | Beaurau of Energy Efficiency (BEE) | | | | | | | |
| **Name of Work** | | | Hiring of Consultant for Technical Study of Electric Vehicle and charging infrastructure | | | | | | | |
| **Broad Scope of Work** | | | | | | | | | | |
| 1 | Identify possible Electric Vehicle (EV) charging options such as public charging stations, private charging options, fleet charging stations and battery swapping stations. | | | | | | | | | |
|  | | | |  | | | | | |
| 2 | Analyzing Technical, safety and performance standards of EV charging stations in conjunction with the existing standards if any | | | | | | | | | |
| 3 | Assess the Indian market (Financially and technically) for type of electric vehicles & charging station. | | | | | | | | | |
| 4 | Define minimum standards for each of the identified options in terms of:  -The charging station design and their electrical aspects.  -Grid connectivity protocols.  -Distribution network design.  -Any other electrical / civil / mechanical aspects those are critical to safe and successful operations of the charging options | | | | | | | | | |
| 5 | Identify policies and regulations to be leveraged / strengthened / drafted for enabling charging infrastructure to set up along with scaling up in usage of electric vehicles. | | | | | | | | | |
| 6 | Detailed study of electric Vehicle-Grid interaction. | | | | | | | | | |
| 7 | Study the readiness of the manufacturing Industries for Electric Vehicles. | | | | | | | | | |
| 8 | Identification of latest technology available for Electric Vehicle and charging station. | | | | | | | | | |
| 9 | Identification of existing challenges/ barriers for usages of electric vehicles and in setting up the charging station infrastructure in India. | | | | | | | | | |
| 10 | International comparison of efficiency metrics of electric vehicles and charging station mechanism in selected countries, comparing the market sizes, trends and its energy performance with inclusion/exclusion of other relevant performance parameters that influence efficiency; | | | | | | | | | |
| 11 | Mapping Identification of international and national test procedures, initial comparison of test procedures, and identification of potential issues in test result comparisons. | | | | | | | | | |
| 12 | Analysis of knowledge gaps and other research needs to be addressed through benchmarking. | | | | | | | | | |
| 13 | Detail out possible options and identify optimal solution in consultation with stakeholders. | | | | | | | | | |
| **Timeline(After Issuance of Work Order)** | | | | | | | | | | |
| 1 Month | | Inception Report | | | | | | | | |
| 3 Month | | Interim Report | | | | | | | | |
| 4 Month | | Final Report | | | | | | | | |
| **Eligibility Criteria** | | | | | | | | | | |
| 1 | Firm incorporated in india | | | | | | | | | |
| 2 | Work Experience in Transport Sector covering aspect of standard related to transport and electric supply | | | | | | | | | |
| 3 | Min Annual Turnover of 2 crores for the last 3 financial years | | | | | | | | | |
| 4 | Profitable for at least 2 of the last 3 financial years | | | | | | | | | |
| 5 | Completed at least 3 assignments in providing consultancy related to E-mobility and charging infrastructure | | | | | | | | | |
| 6 | Should have offices in at least Four Metro cities | | | | | | | | | |
| **Evaluation of Proposals\*** | | | | | | | | | | |
| 1 | Turnover | | | | | | |  | | **5** |
| 2 | Team | | | | | | |  | | **37** |
| 3 | Experience | | | | | | |  | | **40** |
| 4 | Approach & Methodology | | | | | | |  | | **18** |
| 5 | Total | | | | | | |  | | **100** |
| **Evaluation Criteria** | | | **Bidders with minimum of 70 marks will be qualified for the financial bid opening.** | | | | | | | |
| **Date of Prebid Meeting** | | | 15:00,28/11/2017 | | **Prebid Query Submission** | | NA | | | |
| **Date of Tender Submission** | | | 17:00 ,11/12/2017 | | **Tender Fee** | NA | **EMD** | | Rs 1,50,000 | |
| **Performance Security** | | | 10% of Contract Value | | | | | | | |
| **Liquidity Damages** | | | 0.5 % per week delay in delivery ,Cap of 10 % of Contract Value |  |  |  | |  | |  |
| **Estimated Value** | | | Rs. 7.5 Cr.\*\* | | | | | | | |
| **Payments** | | | LOI,PG-10%-->Interim Report-50%-->Final Report-40% | | | | | | | |
| Complex Commercial quotation sheet | | | | | | | |
| **Partner's scope of Work, if any** | | | | | | | | | | |
| 1 | Consortium is allowed | | | | | | | | | |
| **Challenges / Concerns** | | | | | | | | | | |
| 1 | Eligibility in the Evaluation of Proposals | | | | | | | | | |
| 2 |  | | | | | | | | | |
| 3 |  | | | | | | | | | |
| 4 |  | | | | | | | | | |
| Prebid Venue | Conference Hall, Bureau of Energy Efficiency,4th floor, Sewa Bhawan, R K Puram New Delhi – 110066, Tel No.:-91-11-26179699 | | | | | | | | | |
| Bid Submission Venue | Bureau of Energy Efficiency,4th floor, Sewa Bhawan, R K Puram New Delhi – 110066, Tel No.:-91-11-26179699 | | | | | | | | | |
| Contact Person | Mr. Saurabh Diddi,  Director,  Bureau of Energy Efficiency  4th floor, Sewa Bhawan,  R K Puram New Delhi – 110066  Tel No.:-91-11-26179699  Email : sdiddi@beenet.in | | | | | | | | | |

\*\* Taken as per 2 % of E.M.D

**\*Evaluation of Proposal**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **Category** | **Max Marks** | **Marks** | **Possibility** |
| **1** | **Turnover** | **5** |  |  |
| **2** | **Team** | **37** |  |  |
|  | Team leader(Experience. in EM,EVSE standards)  **10-15 Years : 2 Marks ,   16-20 Years :4 Marks ,  >20 Years : 5 Marks** | 5 |  |  |
|  | Team Leader (Relevant Number of Projects related to safety & power equipment standards)  **1-5 Years : 4 Marks ,   6-10 Years :8 Marks ,  >10 Years : 10 Marks** | 10 |  |  |
|  | Team Strength(Relevant Experience)  **4-5 Years : 2 Marks ,   6-8 Years :3 Marks ,  >8 Years : 5 Marks** | 5 |  |  |
|  | Team Average Experience (Years) **4-5 Years : 2 Marks ,   6-8 Years :3 Marks ,  >8 Years : 5 Marks** | 5 |  |  |
|  | Team Average Experience (Projects) **3-5 Years : 4 Marks ,   5-8 Years :8 Marks ,  >8 Years : 12 Marks** | 12 |  |  |
| **3** | **Experience** | **40** |  |  |
|  | Batteries Standards development ( like TFLA,VRLA, Li-ion etc) **Each Project will have 2 marks subject to maximum of 10 marks** | 10 |  |  |
|  | Charging equipment standards development **Each Project will have 2 marks subject to maximum of 10 marks** | 15 |  |  |
|  | Framing of International standards/reregulate related to electric mobility and related infrastructure **Each Project will have 2 marks subject to maximum of 10 marks** | 15 |  |  |
| **4** | **Approach& Methodology** | **18** |  |  |
|  | Roadmap on fcreation of EV infrastructure in India **Average of marks from all the reviewers(subjective assessment)** | 10 |  |  |
|  | Suitabiliy with the national requirement **Average of marks from all the reviewers(subjective assessment)** | 8 |  |  |
|  | **TOTAL TECHNICAL SCORE** | **100** |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **BEE Responsibility Matrix** | | | |
| **Sr No** | **Activity Area** | **DIMTS** | **ACS** |
| 1 | Identify possible Electric Vehicle (EV) charging options such as public charging stations, private charging options, fleet charging stations and battery swapping stations. |  |  |
| 2 | Analyzing Technical, safety and performance standards of EV charging stations in conjunction with the existing standards if any |  |  |
| 3 | Assess the Indian market (Financially and technically) for type of electric vehicles & charging station. |  |  |
| 4 | Define minimum standards for each of the identified options in terms of:-The charging station design and their electrical aspects.,Grid connectivity protocols.,Distributed Network Design,Other aspects for succesful charging options |  |  |
| 5 | Identify policies and regulations to be leveraged / strengthened / drafted for enabling charging infrastructure to set up along with scaling up in usage of electric vehicles. |  |  |
| 6 | Detailed study of electric Vehicle-Grid interaction. |  |  |
| 7 | Study the readiness of the manufacturing Industries for Electric Vehicles. |  |  |
| 8 | Identification of latest technology available for Electric Vehicle and charging station. |  |  |
| 9 | Identification of existing challenges/ barriers for usages of electric vehicles and in setting up the charging station infrastructure in India. |  |  |
| 10 | International comparison of efficiency metrics of electric vehicles and charging station mechanism in selected countries, comparing the market sizes, trends and its energy performance with inclusion/exclusion of other relevant performance parameters that influence efficiency; |  |  |
| 11 | Mapping Identification of international and national test procedures, initial comparison of test procedures, and identification of potential issues in test result comparisons. |  |  |
| 12 | Analysis of knowledge gaps and other research needs to be addressed through benchmarking. |  |  |
| 13 | Detail out possible options and identify optimal solution in consultation with stakeholders. |  |  |