



**SITARC EV Foundation (SITARC EVF),**

369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO,  
Coimbatore – 641 021.

Phone: +91 90437-24441, +91 94877-40473.

E-mail: [sitarcevf@sitarc.com](mailto:sitarcevf@sitarc.com), [sitarcevclus@gmail.com](mailto:sitarcevclus@gmail.com);

Website: [www.sitarc.com](http://www.sitarc.com)

**Notice Inviting Tender**

**Tender Notice No: SEVF/TEQ/DYN/2025-26/001**

**Subject: Tender For Supply Installation and Commissioning of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer.**

SITARC EV Foundation (SITARC EVF) is, the Special Purpose Vehicle (SPV), establishing a Common Facility Centre (CFC) at 369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021.

Regard to the same sealed tenders as per two bid tender system such as Techno-Commercial bid and Price bid are invited for Supply, Installation and Commissioning of Test System, equipment and instruments for the testing of motors and controllers of Electric Vehicles of two and three wheelers.

The Techno- Commercial Bid shall be kept in Envelop – A and the Price Bid shall be kept in Envelope – B. It may strictly inform that only the price details shall be provided in Envelop – B and both envelope A and B (Properly Sealed and Signed) are to be kept inside in an outer envelope, of bigger size, with properly sealed and signed.

We request you to write for any clarification on the Tender Documents by email to [sitarcevf@sitarc.com](mailto:sitarcevf@sitarc.com).

The “Authority”: The Director, SITARC EVF, Coimbatore, intends to select a firm for the supply of above said items based on the Quality and Cost Based Selection (QCBS) process described in detail in the tender document on the portal [www.sitarc.com](http://www.sitarc.com) &

## SITARC EV FOUNDATION

[www.tendersontime.com](http://www.tendersontime.com) as per the timelines given in the schedule in Table 1 of Appendix I.

The tender document can be downloaded from the websites [www.sitarc.com](http://www.sitarc.com) and [www.tendersontime.com](http://www.tendersontime.com) (under the Tenders Categories – Free Tenders). The cost of Tender document downloaded from the website will have to be paid in Demand Draft (DD) in favour of SITARC EVF payable at Coimbatore and submitted along with tender document.

The bidders responding to this Tender Document need to pay Earnest Money Deposit according to the schedule in the Tender document (TD).

TD process for the Authority shall be valid even if there is only one qualified bidder, provided that the bidder qualifies according to the criteria stated.

The tender may be cancelled, withdrawn or postponed at any time by SITARC EVF without assigning any reason.

The comments and suggestions provided by the Bidder on the Tender Notice/Terms of Reference are not binding and shall not affect the Notice unless the Authority issues a corrigendum or addendum on the web portal / email.

Thanking You

With Regards,

The Director – SITARC EVF  
Coimbatore.

**Appendix I**  
**Schedule of the selection process and on-boarding of the vendor:**

All times are in Indian Standard Time (IST) and no exceptions will be made for late submissions. The Authority will endeavour to follow the schedule below;

**Table - 1**

Sl. No	Description of milestones	Latest by
1.	Date of Invitation for bids	27-06-2025 (10.00 A.M)
2.	Pre-bid meeting (PBM) In person	03-07-2025 (10.30 AM)
3.	Due date & time for downloading the bid documents	One hour before BDD
4.	Bid Due Date (BDD) & time for submission of bids	28-07-2025 (5.00 PM)
5.	Date of opening of Techno commercial Bid	29-07-2025 (10.30 AM)
6.	Presentation to panel of experts	Will be intimated to the qualified bidders separately
7.	Date of opening of Price Bid	
8.	Date of finalising successful bidder	
9.	Communication to successful bidder and commencement of work	
10.	Issue of work order to successful bidder	
11.	Signing of agreement	Within 30 Calendar days from opening of Commercial bid.
12.	Submission of bank guarantee	Within 15 Calendar days from signing of agreements.
13.	Delivery Period	Refer Annexure 3
14.	Bid validity	6 months from the BDD.

Sl. No	Description of milestones	Latest by
15.	EMD to be paid on DD/Bank Guarantee (BG)	at the rate of 2 % of total cost for the item that is being quoted
16.	Security Deposit	A security deposit at the rate of 5 % of the total cost quoted in the form of DD/BG.
17.	Cost of the Tender Document	Rs.1000 (Including 18 % GST)
18.	Web Portal	<a href="http://www.sitarc.com">www.sitarc.com</a> & <a href="http://www.tendersontime.com">www.tendersontime.com</a>
19.	Location of Pre-bid Meeting and Submission Bids	SCIENTIFIC AND INDUSTRIAL TESTING AND RESEARCH CENTRE (SITARC), 83 & 84, Avarampalayam Road, K. R. Puram Post, Coimbatore – 641 006.
20.	Material Delivery Location	SITARC EV Foundation (SITARC EVF), 369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021.

**Bidders must fulfil the following prerequisites:**

Sl. No	Pre-Qualification (PQ) Criteria
1	Bidder should be registered in India under the Companies Act/ LLP Act and should have been in existence for at least three years on the date of publication of tender. In case of the proprietorship firm, certificate from CA regarding proprietorship status will be attached along with the registered GST Certificate.
2	The average annual turnover of the tenderers in the previous three Commercial / accounting years (FY 22-23, FY 23-24, FY 24-25) shall be 5 Crores.
3	The bidder should have completed a minimum of three electric vehicle motor test systems, The capacity is equal (or) higher than that of the tendered item, during the financial years (FY 2022-23, FY 2023-24, FY 2024-25, and FY 2025-26) and at least one during the last or current financial year in India / Global.  Note: The Tenderer has to quote with a copy of previous supply order in supportive of their claim. The Authority reserves the right to depute committee/Reps to check the instrument, equipment and system capabilities.
4	The Bidder should not have been blacklisted by Government of India/ Tamil Nadu/ other state governments in India or undertakings/ entities under/ owned by these governments as on bid submission date.
5	EMD/ Bid Security should be submitted for 2% of quoted price through DD or Bank Guarantee (BG). Bidders with a valid Udyam certificate will be exempted from the payment of EMD, however, the certificate be valid as on date of bid submission.

**Note:** Compliance statement (as per format in PRE-QUAL-1 Compliance Statement for Prequalification Criteria) needs to be submitted by the bidder along with the technical proposal.

## TABLE OF CONTENTS

Notice Inviting Tender .....	1
Appendix I.....	3
Disclaimer.....	9
Section 1: Introduction .....	10
Section2: Instruction to Bidders (ITB) and Information Sheet .....	11
A. GENERAL PROVISIONS .....	11
1. Definitions.....	11
2. Introduction.....	12
3. Terms and Conditions – General .....	12
B. PREPARATION OF TENDER DOCUMENT .....	14
4. General Consideration .....	14
5. Cost of Preparation of Tender .....	14
6. Language.....	14
7. Bidder Qualification Requirements and Supporting Documentation.....	14
8. Earnest Money Deposit.....	16
9. Documents Comprising the Tender .....	17
10. Tender Validity .....	17
11. Extension of Validity Period .....	17
12. Pre-Bid Meeting .....	17
13. Techno commercial Bid Format and Content.....	18
C. SUBMISSION, OPENING AND EVALUATION .....	19
14. Submission of Tender .....	19
15. Confidentiality .....	19
16. Withdrawal of Bid.....	19
17. Opening of Tender.....	20
18. Techno commercial Bid Details.....	21
19. Price Bid Details .....	22
20. Tender Evaluation .....	23
21. Evaluation of Techno commercial Tenders.....	23
22. Price Bid and Overall Evaluation .....	23

<b>D. AWARD OF CONTRACT AND AGREEMENT .....</b>	<b>24</b>
23. Acceptance Award of Purchase Order .....	24
24. Performance Security Deposit .....	24
25. Authority of Signing .....	25
26. Inspections .....	25
27. Delivery Terms.....	25
28. Installation.....	26
29. Commissioning.....	27
30. Service.....	27
31. Insurance Commercial details.....	27
32. Training of Technical Personnel.....	27
33. Performance Test .....	27
34. Guarantee/Warranty Period.....	28
35. Annual Maintenance Contract (AMC) .....	28
36. Calibration .....	28
37. Software Licenses .....	29
38. Terms and Conditions .....	29
39. Termination of Contract .....	29
40. Additional Specifications/Feature .....	29
41. Compliance Statement .....	30
<b>E. OTHER TERMS AND CONDITIONS .....</b>	<b>31</b>
42. Force Majeure .....	31
43. Payment Procedure .....	31
44. Saving Clause.....	32
45. Penalty Clause.....	33
46. Disputes Resolution.....	33
47. Disqualification.....	34
<b>F. INFORMATION SHEET .....</b>	<b>36</b>
I. General .....	36
II. Preparation of Tenders .....	36
III. Submission, Opening and Evaluation.....	37
<b>Section3: Techno commercial Tender – Standard Forms .....</b>	<b>41</b>

<b>PRE-QUAL-1</b> .....	<b>42</b>
<b>FORM TECH-1</b> .....	<b>43</b>
<b>FORM TECH-2</b> .....	<b>45</b>
<b>FORM TECH-3</b> .....	<b>46</b>
<b>FORM TECH – 4</b> .....	<b>48</b>
<b>FORM TECH-5</b> .....	<b>49</b>
<b>FORM TECH-6</b> .....	<b>50</b>
<b>FORM TECH-7</b> .....	<b>51</b>
<b>FORM TECH-8</b> .....	<b>54</b>
<b>FORM TECH-9</b> .....	<b>55</b>
<b>FORM TECH-10</b> .....	<b>56</b>
<b>ANNEXURE I</b> .....	<b>57</b>
<b>ANNEXURE II</b> .....	<b>58</b>
<b>ANNEXURE III</b> .....	<b>59</b>
<b>ANNEXURE IV</b> .....	<b>60</b>
<b>Section4: Commercial Bid – Standard Forms</b> .....	<b>72</b>
<b>FORM FIN-1</b> .....	<b>73</b>
<b>FORM FIN-2</b> .....	<b>75</b>
<b>FORM FIN-3</b> .....	<b>80</b>
<b>FORM FIN-4</b> .....	<b>81</b>
<b>FORM FIN-5</b> .....	<b>82</b>
<b>FORM FIN-6</b> .....	<b>85</b>
.....	<b>85</b>
<b>FORM FIN-7</b> .....	<b>86</b>
<b>Section 5: Check List to The Bidders</b> .....	<b>88</b>



## Disclaimer

1. The information contained in this Tender document provided to the Bidders, by the Authority, or any of their employees or advisors, is provided to the Bidder(s) on the terms and conditions set out in this Tender document and all other terms and conditions subject to which such information is provided.
2. The purpose of this Tender document is to provide the Bidder(s) with information to assist in the formulation of Tenders. This Tender document does not purport to contain all the information each Bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for the Authority to consider the business/investment objectives, Commercial situation and particular needs of each Bidder who reads or uses this Tender document. Each Bidder shall conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this tender document and where necessary obtain independent advice from appropriate sources.
3. The SITARC EVF Authority and its employees make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the Tender document.
4. The Authority may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this Tender Document.
5. The Authority accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any bidder upon the statements contained in this Tender.
6. The Authority reserves the right to reject all or any of the Tenders and cancel or suspend the bid without assigning any reasons whatsoever.
7. The issue of this Tender does not imply that the Authority is bound to select a bidder or to appoint the selected bidder, as the case may be, for the consultancy.
8. The bidder shall bear all costs associated with or relating to the preparation and submission of its Tender and attending various meetings thereof. The Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by the bidder in preparation or in submission of the Tender, regardless of the conduct or outcome of the selection process.

## Section 1: Introduction

Scientific and Industrial Testing and Research Centre (SITARC), a renowned laboratory is established in the year of 1987.

SITARC was recognized by Bureau of Indian Standards (BIS) in its first year 1987 itself to test pumps and motors, Bureau of Energy Efficiency (BEE) & Ministry of New and Renewable Energy (MNRE).

It is accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) in accordance with ISO / IEC 17025:2017 for its facilities in the field of Testing and Calibration.

The Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology (MST), New Delhi has given recognition as a research laboratory from the year of 1988 onwards.

The intent of this procurement is to obtain a fully automated electric vehicle motor test system featuring a regenerative dynamometer. This system is designed to facilitate comprehensive performance and durability testing of EV motors and controllers under various load conditions. Its regenerative capability allows energy recovery during testing, promoting energy efficiency and sustainability. By ensuring compliance with industry standards, this equipment will support the development and validation of reliable, high-performance of electric vehicle motors and its controllers.

## Section2: Instruction to Bidders (ITB) and Information Sheet

### A. GENERAL PROVISIONS

#### 1. Definitions

- a. "Applicable Law" means the laws and any other instruments having the force of law in India and specifically Tamil Nadu, as they may be issued and in force from time to time.
- b. "Authority" means Tender inviting authority i.e., The Director – SITARC EVF.
- c. "SITARC EVF" means SITARC EV Foundation.
- d. "Bidder" means an Entity that submits a bid.
- e. "PBM" means Pre-bid Meeting.
- f. "Contract" means a legally binding written agreement signed between the Authority and the successful Bidder and includes all additional documents as may be specified by the Authority.
- g. "Information Sheet" means an integral part of the Instructions to Bidders (ITB) Section 2 that is used to reflect specific assignment conditions to supplement, but not to over-write, the provisions of the ITB.
- h. "Day" means a calendar day including Sunday and National Holidays.
- i. "Entity" means a Firm/ Company with a distinct legal identity.
- j. "In writing" means communicated in written form (e.g., by letter, e-mail, including, if specified in the Information Sheet, distributed) with proof of receipt;
- k. "ITB" (this Section 2 of the TD) mean the Instructions to Bidders that provides the Bidders with all information needed to prepare their Tenders.
- l. MSME means an industry defined as per the MSMED Act,2006 & Subsequent.
- l. "TD" means this Tender Document prepared by the Authority for the selection of Vendor.
- m. "TB" means the Techno commercial BID of the bidder.
- n. "PB" means the Price BID of the bidder.
- o. "BG" means Bank Guarantee.
- p. "SD" means Security Deposit.
- q. "Vendor" means a legally established entity/ entities that may supply equipment / instrument / Test System to the SPV under the Contract / Purchase Order.

## 2. Introduction

2.1. The Authority named in the Information Sheet intends to select a Bidder in accordance with the method of selection specified in the Information Sheet.

2.2. The Bidders are invited to submit a Techno commercial Bid for the items named in the Information Sheet and will be the basis for selection before the commencement of opening Commercial Bid.

2.3. The Bidders should familiarize themselves with the local conditions and take them into account in preparing their bids, including attending a pre-bid meeting if one is specified in the Information Sheet. Attending any such pre-bid meeting is optional and is at the Bidder's expenses.

2.4. The Procured Items through this Tender will be owned by Bureau for Facilitating MSME's TN (FaMe TN) an organization under MSME Department, Government of Tamil Nadu.

## 3. Terms and Conditions – General

3.1. Tender documents shall be issued by The Director, SITARC EVF, Coimbatore to manufacturers / authorized agents. The Director, SITARC EVF, Coimbatore will be the tender issuing authority.

3.2. Modifications, if any, made in the tender documents will be by addendum and shall be uploaded in SITARC website, copies of which will be sent in duplicate to each bidder before the due date of the tender. One copy of this Addendum should be signed, sealed and submitted along with the techno commercial bids. The bidder shall not make any additions / deletions to or amend the text of the documents except in so far as may be necessary to comply with any addenda issued. The bidders shall use only tender documents as issued for submitting their bid and shall comply with terms and conditions mentioned therein.

3.3. The tender document shall be duly signed by the authorized person of the supplier on all pages without any deletion or addition other than addenda released.

**Note: The bidder shall submit the bid in duplicate duly signed.**

3.4. The full name of the person authorized to file the tender, designation, current and main office address, Phone/Mobile Number and E-mail shall be indicated in the tender.

- 3.5. Tenders sent through E-mail and soft copies will not be entertained.
- 3.6. SITARC EVF will not be responsible for any typographical errors/ ambiguity/ additions / omissions committed by the bidder while filling up of the tender.
- 3.7. Submission of a bid by a tenderer implies that the bidder has read all terms and conditions, and has made himself aware of the scope and specifications of the items to be supplied, availability of materials, local conditions and other factors bearing on the execution of the supply.
- 3.8. The bidder shall be deemed to have full knowledge of documents and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
- 3.9. Any queries regarding the tender document and discrepancies shall be directed to the Tender Issuing Authority in writing the letter by registered post / by email before the date of pre-bid meeting. The Tender Issuing Authority may issue all clarifications, interpretations, meanings and specific directions, if any after pre bid meeting, in the form of an addendum in duplicate in writing to all the bidders and shall be uploaded in SITARC website. One copy of the same shall be returned duly signed and seal affixed along with the bids.
- 3.10. Intending bidders, who have downloaded Tender Documents from the said websites are advised either to remain in touch with Tender Issuing Authority, SITARC EVF, through writing or visit said website at intervals deemed fit, so that they will not get left out from being informed as and when addenda / corrigenda/ clarifications, interpretations, meanings and specific directions, if any, are issued.
- 3.11. The bidder shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and about the rates quoted by him and cover all his obligations under the tender.
- 3.12. Bids submitted by manufacturer's authorized agents (copy of manufacturer's authorization letter to be enclosed) only shall be considered.
- 3.13. The bidder should have been meritable in last 3 years for supply of tender item from the tender date.

**B. PREPARATION OF TENDER DOCUMENT**

<b>4. General Consideration</b>
4.1. In preparing the Tender Document (TD), the Bidder is expected to examine the TD in detail. Material deficiencies in providing the information requested in the TD may result in rejection of their Tender.
<b>5. Cost of Preparation of Tender</b>
5.1. The Bidder shall bear all costs associated with the preparation and submission of its Tender, and the Authority shall not be responsible or liable for those costs, regardless of the conduct or outcome of the selection process. The Authority is not bound to accept any Tender and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Bidder.
<b>6. Language</b>
6.1. The Tender, as well as all correspondence and documents relating to the Tender exchanged between the Bidder and the Authority shall be written in the language specified in the Information Sheet.
6.2. If the supporting documents are other than the language specified in the Information Sheet, the notarized translated version of the documents should also be enclosed. Tenders received without such translated copy will be summarily rejected.
<b>7. Bidder Qualification Requirements and Supporting Documentation</b>
7.1. In case the bidder is an Original Equipment manufacturer, they shall have to furnish the following: <ul style="list-style-type: none"> <li>i. Registration / Company Incorporation Certificate.</li> <li>ii. The Tenderer should have minimum 3 years of experience in manufacturing of item mentioned in the Annexure 3. A duly attested photocopy of Manufacturing License for the products approved by the Licensing authority of the country of origin for each and every product quoted. The license must have been renewed up to date and the item quoted shall be clearly highlighted in the license.</li> </ul>

iii. The tenderer should have supplied minimum of three units in India and one during last / current financial year. The tenderer has to quote with a copy of previous supply order. The Authority reserves the right to depute committee/Reps to check the instrument, equipment and system capabilities.

iv. The Tenderer should furnish performance statement/ declaration giving list of major supplies effected to firms in India with supporting documents during the past 3 years giving the details of purchaser's name and address, quantity supplied & whether the supply was made within the delivery schedule.

v. The average annual turnover of the tenderers in the previous **three** Commercial/ accounting years (FY 22-23, FY 23-24, FY 24-25) shall be **Rs. 5 Crore**.

vi. The bidder should have a valid GST Registration Certificate.

**The documents in proof of the above shall be attached with the "Techno commercial Bid" envelope.**

**7.2. In case the bidder is the Authorized Dealer/ Agent/ Recognized Industrial Distributor quoting on behalf of their Principal, they shall have to furnish the following:**

i. Registration / Company Incorporation Certificate.

ii. The Tenderer should have minimum 3 years of experience in trading/ selling & distributing of item mentioned in the data sheet. Valid Authorization/ Dealership Certificate from their principal. Documents to indicate the precise relationship between their principal will be given preference.

iii. The Tenderer should quote with tender, specific authorization from their principal.

iv. The tenderer should have supplied minimum of three units in India and one during last / current financial year. The tenderer has to quote with a copy of previous supply order. The Authority reserves the right to depute committee/Reps to check the instrument, equipment and system capabilities.

v. The Tenderer should furnish performance statement / declaration giving list of major supplies effected to firms in India with supporting documents during the past 3 years giving the

details of purchaser's name and address, quantity supplied & whether the supply was made within the delivery schedule.

vi. The Tenderer should submit Manufacturer's Test Certificate & Guarantee / Warranty Certificate with each lot of supply. (Note: Enclose certificate of origin of machinery.)

vii. The average annual turnover of the tenderers in the previous three Commercial / accounting years (FY 22-23, FY 23-24, FY 24-25) shall be 5 Crores.

(Note: While calculating the turnover, clubbing of turnover of parental or sister concerns are not allowed. However, it will be considered if the original equipment manufacturer has their own branch in India or representative for taking care of their operations in India)

viii. The tenderer should not have been blocklisted by any state/Central Governments/PSUs (Under taking to be submitted).

**The documents in proof of the above should be attached with the "Techno commercial Bid" envelope A.**

## **8. Earnest Money Deposit**

**8.1.** Tender documents must be accompanied by Earnest Money Deposit (EMD) at the rate of 2 % of total cost for the item that is being quoted for, in the form of DD / Bank Guarantee (BG) in favour of payable at SITARC EVF, Coimbatore. In case of bank guarantee, Refer the FORM FIN-5 in this tender document is to be used for furnishing bank guarantee, the same shall only be used without any deviations whatsoever. Failure to adhere to this norm will lead to rejection of tender. Note that, the bank guarantee format given is to be used only for EMD.

**8.2.** EMD shall be paid in Indian currency only.

**8.3.** EMD is exempted for Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy. The valid Udyam certificate need to be submitted.

**8.4.** The EMD of unsuccessful bidders will be returned on or before the 30<sup>th</sup> day after the award of the contract without any interest.

**8.5.** The EMD for successful bidder will be returned after receiving the security / performance deposit. (Read the details under the heading on security / performance deposit Clause No. 24).



**8.6.** The EMD shall be forfeited if the bidder withdraws his offer after the tender opening, during the bid validity period or after the award of contract. SITARC EVF, shall not be liable for payment of any interest on EMD any depreciation thereof.

**8.7.** Any offer not accompanied with the EMD shall be rejected summarily as non-responsive.

## **9. Documents Comprising the Tender**

**9.1.** The Tender shall comprise the documents and forms listed in the Information Sheet.

## **10. Tender Validity**

**10.1.** The Information Sheet indicates the period during which the Bidder's bid must remain valid after the Tender submission deadline.

**10.2.** The bidder shall not withdraw or revise or alter any conditions, rate(s) quoted within this stated period.

**10.3.** During this period, the Bidder shall maintain its original techno commercial bid and the Commercial bid without any change.

## **11. Extension of Validity Period**

**11.1.** The Authority will make its best effort to complete the tender process within the Tender's validity period. However, should the need arise, the Authority may inform to all the Bidders who submitted Tenders prior to the submission deadline to extend the Tender's validity.

**11.2.** If the Bidder agrees to extend the validity of its Tender, it shall be done without any change in the original Tender.

**11.3.** The Bidder has the right to refuse to extend the validity of its Tender (without forfeiture of the EMD) in which case such Tender will not be further evaluated.

## **12. Pre-Bid Meeting**

**12.1.** There will be a Pre-Bid Meeting Refer Table 1 for Date, Time and Location, during which the prospective tenderers can get clarifications about the tender. The tenderers shall send their queries in writing (if any) so as to reach the SPV at least two days prior to the pre-bid meeting date. The tenderers may also check the website indicated in Table 1 for any up-to-date information like change in date/ time/ venue etc., of pre-bid meeting as the SPV may not be able to identify and communicate with the prospective bidders at this stage.

<b>13. Techno commercial Bid Format and Content</b>
---

<p>13.1. Techno commercial Bid shall be prepared using the Standard Forms provided in Section 3 of the TD and shall comprise the documents listed in the Information Sheet. The Techno commercial bid shall not include any Price bid information. A Techno commercial bid containing material Price bid information shall not be considered.</p>
---

<p>13.2. The Price bid shall be prepared using the Standard Forms provided in Section 4 of the TD.</p>
--

**C. SUBMISSION, OPENING AND EVALUATION**

<b>14. Submission of Tender</b>
<p>14.1. The Bidder shall submit a signed and complete bid comprising the documents and forms in accordance with Clause 9 (Documents Comprising the Tender). The submission will be done physically by in- person only.</p> <p>14.2. An authorized representative of the Bidder shall sign the original submission letter in the required format for the Techno commercial bid and Price bid in the TD.</p> <p>14.2.1. Techno commercial Bid Submission Form (FORM TECH-1) and Price Bid Submission Form (FORM FIN-1) need to be signed physically by the authorized representative.</p> <p>14.2.2. The authorization, authorizing the Bidder's representative to sign the bids shall be in the form of a written Power of Attorney attached to the Techno commercial Bid and Price Bid.</p>
<b>15. Confidentiality</b>
<p>15.1. From the time the Tenders are opened to the time the contract is awarded / Issue of Purchase Order, the Bidder should not contact the Authority on any matter related to its Tender. Information relating to the evaluation of Tenders and award recommendations shall not be disclosed to the Bidders who submitted the Tenders or to any other party not officially concerned with the process, until the publication of the Contract award information.</p> <p>15.2. Any attempt by Bidders or anyone on behalf of the Bidder to influence improperly the Authority in the evaluation of the Tenders or Contract award decisions may result in the rejection of the relevant Tender. Such bidders may be subject to the application of prevailing Authority's sanctions/ penal procedures.</p> <p>15.3. Notwithstanding the above provisions, from the time of the Tenders' opening to the time of Contract award publication, if any Bidder wishes to contact the Authority on any matter related to the selection process, it should do so only in writing.</p>
<b>16. Withdrawal of Bid</b>
<p>16.1. The Bidder may modify, substitute or withdraw its Bid after submission, provided that written notice of the modification, substitution or withdrawal is received prior to the BDD and time. No Bid shall be modified, substituted or withdrawn by the Bidder on or after the BDD and time.</p>

**17. Opening of Tender**

17.1. The tenders shall be opened by the **Purchase Committee of the SPV**, at the time, date and venue as given in the "Table-1".

17.2. Tenders will be opened in the presence of tenderers / representatives who choose to attend on the specified date and time.

17.3. The Envelope "A" superscribed as "Techno commercial Bid" will be opened first. The Envelope "B" superscribed as "Price Bid" will be opened only if the documents required in the "Techno commercial Bid" are found in order as per tender conditions.

17.4. The bidder will be deemed to have understood and agreed that no explanation or justification on any aspect of the bidding process or selection will be given.

17.5. If any information furnished to be in completed, or contained in formats other than those specified herein, SITARC EVF may, in its sole discretion, exclude the relevant details for Qualifying in eligibility Criteria.

17.6. SITARC EVF reserves the right to visit the manufacturer's / distributor's premises to verify the authenticity and capability of the Tenderer.

17.7. If "Techno commercial Bid" is not submitted along with the required particulars, then the "Price Bid" envelope will not be opened and the tender will be rejected.

17.8. The Techno commercial Bid in Envelope A will be opened at the time, date and venue as given in the "Table-1" by the SPV in the presence of such of those tenderers or their representatives. The Tenderers or their Representatives who choose to be present at the time of opening of the Tender should bring a letter of authority from the Tenderers, whom they represent to identify their Bonafide.

17.9. Only after evaluation of the techno commercial bids are completed the Price Bid will be opened. The date of opening of the Price bid is as per the schedule given in Table 1 (or) any other date as decided by the Purchase Committee of SPV and whatever the decision regarding the Price bid opening, it will be communicated to the bidders who are qualified for the techno commercial bid.

17.10. The non-qualified bidders will be informed and their EMD Will be refunded as per clause 8.4.

**18. Techno commercial Bid Details**

18.1. Compliance to technical specifications of the machinery/equipment/items for which bids are submitted as given in Annexure IV. Compliance shall be in same sequence as of specifications mentioned in documents. The range specified in the technical specifications should have min. or max. as the case may be.

18.2. Proof that the bidder is (i) either manufacturer or (ii) an authorized distributor/ authorized dealer or (iii) reputed supplier for the machinery/ equipment/ items for which the bid is submitted. Power of attorney/ authority letter authorizing the person who has filed the tender, if applicable for which the format is given in FORM FIN-7.

18.3. List of customers/ organizations in India, along with Contact Person, address, Tel. No./Mobile No., Fax No., email id, etc., to which similar machinery/ equipment/ items were supplied & successfully commissioned.

18.4. The probable life expectancy of the machines as specified in the tender under normal conditions of operation should be minimum 15 years.

18.5. All the details of pre-installation requirements including space, power supply, environmental conditions, special structures, standard operating practices / operating manuals, preventive & regular maintenance schedule recommendation charts, if any.

18.6. The Tenders should be accompanied by all the particulars requested in the schedule including process flow chart / techno commercial specifications, specifications of the material used, dimensions, drawings, foundation drawings etc. of the respective item quoted if necessary.

18.7. Tenders are not transferable.

18.8. Unclear tenders will not be accepted.

18.9. Original Tender document duly signed by the authorized person on all pages including addenda without any deletion or addition other than addenda / corrigenda released.

**Compliance to techno commercial specifications of the equipment / item for which bids are submitted:**

18.10. Authorized person shall specify **“all the above technical specifications will be complied with”** and sign in respective pages of the Tender document, where specification of the

equipment / items is given and also give the exact specifications complied with the equipment / item.

**Covering letter, in the letter head of the bidder, providing confirmation to the following:**

18.11. The Guarantee / Warranty period mentioned as per the CI.No.34 after installation and commissioning of the equipment/item.

18.12. Confirmation about the supply of Certified Reference Materials / Samples for checking the performance of the item wherever appropriate.

18.13. The details regarding the service centres, stocking of spares etc.,

18.14. Addenda / clarification issued by SITARC EVF before due date of tender, duly signed by the authorized person.

18.15. A letter indicating assumptions, criterion, techno commercial alternative etc., if any. However, the alternatives suggested by the bidder may not be taken as the basis for techno commercial / commercial evaluation of the bids.

18.16. A copy of the certificate for the calibration of the similar makes and model of equipment / item for which bid is submitted from an accredited calibration laboratory or National Physical Laboratory wherever applicable.

18.17. Profile of bidder's organization.

18.18. Complete Bill of Material without cost for which the format is given in FORM TECH -7.

## **19. Price Bid Details**

19.1. The rates should be quoted in Indian Rupees (INR), both in figures and words. The rates quoted shall be inclusive of Cost, Packaging, Freight, Insurance, erection & commissioning, testing, training to techno commercial staff to operate the machinery/ equipment etc. up to our premises, Basic price of supply to be mentioned with GST/ Customs duty, freight and forwarding charges, handling charges and any other tax/ charge as applicable to be mentioned separately.

19.2. The rate Quoted by the bidder shall be kept firm for a period specified in the tender from the date of opening of the tender. The bidder should keep the price firm during the entire period of the contract including extension of time, if any. Escalation of rate will not be permitted during the said periods whether extended or not for reason other than increase of taxes payable to the Government of India within the stipulated delivery period.

19.3. The bidder shall also show the amount of each item, the total of each section and the grand total of the whole tender as specified. Corrections (if any) shall be made out by crossing out, initialling, with date and rewriting and overwriting if any, shall also be initialled. If the bidder does not accept the correction of the errors, his/her/its tender documents will be rejected.

## **20. Tender Evaluation**

20.1. The Bidder is not permitted to alter or modify its Tender in any way after the BDD and time. While evaluating the Tenders, the technical committee will conduct the evaluation solely on the basis of the submitted Techno commercial Tenders, initially.

## **21. Evaluation of Techno commercial Tenders**

21.1. The Technical committee shall evaluate the Techno commercial Tenders on the basis of their responsiveness to the TD applying the pre-qualifying criteria, evaluation criteria, and point system specified in the Information Sheet. Each responsive Tender will be given a techno commercial score. A Tender shall be rejected at this stage if it does not respond to important aspects of the TD.

21.2. Up to top five bidders will be shortlisted based on their techno commercial scores. The top five bidders will be contacted for document verification with originals wherever required. The qualified bidders will be invited for making a presentation before a committee.

21.3. The presentations can be made physically (or) through on - line mode.

## **22. Price Bid and Overall Evaluation**

22.1. The Purchase Committee shall open the Price Bid only for those bidders who are techno commercially qualified and are in the top five positions on the basis of the scores evaluated by the technical committee.

22.2. The overall score of the bidders will be a weighted average of their techno commercial bid and price bid scores as per the criteria specified in the Information Sheet Clause 21.1.

22.3. For the purpose of evaluating the Price-bid, the total price of the proposed system quoted by the bidder shall be assessed based on the details provided in **Form Tech 8 & Form Tech 9**. These forms shall be considered as the basis for the overall price evaluation.

**D. AWARD OF CONTRACT AND AGREEMENT****23. Acceptance Award of Purchase Order**

23.1. A Letter of Acceptance (LOA) shall be submitted by the successful bidder along with Security Deposit (SD) before receiving the Purchase Order (PO) from SITARC EVF. the details about the Security Deposit (SD) are prescribed in Clause no. 24.

23.2. An agreement shall be signed between SITARC and the successful bidder.

23.3. A PO will be issued on receipt of LOA submitted by the bidder. A copy of the PO received shall be signed and returned as a token of acceptance of the terms and conditions of the Purchase Order along with the specifications while signing the agreement.

23.4. The SITARC EVF reserves all rights to reject any tenderer without assigning any reasons thereof and the same shall not be questioned on any ground, the SITARC EVF reserves the right to cancel any or all tenders without showing any specific reason.

**24. Performance Security Deposit**

24.1. A security deposit at the rate of **5 %** minimum of the total cost quoted in the form of DD/BG shall be collected from the successful bidder and shall be held back as security deposit till successful installation, trial and training and subsequently as performance security deposit till the end of completion of the free services.

24.2. In case of bank guarantee, the format given under the heading of “PROFORMA FOR BANK GUARANTEE FOR SECURITY DEPOSIT AND PERFORMANCE SECURITY” shall be issued. The amount shall be returned after 60 days, after the completion of all contractual obligations including Guarantee / Warranty obligations or completion of the free services. The EMD shall be adjusted with the security deposit.

24.3. If the performance is not satisfactory or warranty obligation or free service are not completed, the security deposit amount will not be returned. SITARC EVF shall not be liable for payment of any interest on security/performance deposit or any depreciation thereof.



**25. Authority of Signing**

25.1. If the tender is submitted by an individual, it shall be signed by him. If the tender is submitted by a proprietary firm, it shall be signed by the proprietor.

If the tender is submitted by a partnership firm, it shall be signed by all the partners of the firm or by a partner holding the power of attorney for the firm for signing the tender, in which case, a certified copy of power of attorney shall accompany the bid as prescribed in FORM FIN-7.

If the tender is submitted by a limited company or a corporation, it shall be signed by a duly authorized person or the person holding the power of attorney for signing the tender, in which case a certified copy of the power of attorney shall accompany the bid as prescribed in FORM FIN-7.

25.2. The Tenderer must sign and affix their seal in every page of the tender document and the complete signed original tender documents must be submitted in the envelopes. Refer Section 5.

**26. Inspections**

26.1. Pre-dispatch inspection should be arranged by the supplier before clearing dispatch of quoted item with his own all expenses (which includes travel and accommodation) during visit by purchaser.

26.2. The supplier shall ensure and demonstrate the system/instrument/equipment's (or mutually agreed between purchaser and supplier) at the supplier's premises.

26.3. However, final acceptance of the system/instrument/equipment's would be done only after successful installation, commissioning and training at Purchaser premises.

**27. Delivery Terms**

27.1. The respective item should be installed and commissioned within the schedule given Annexure III from the date of receipt of the Purchase Order. If the above item is not delivered, installed and commissioned within the period specified, the security deposit amount will be forfeited and the tender will be cancelled and loss if any for inviting fresh tenders will be made from the defaulter.

27.2. However, the bidder has an option to submit the best delivery time prior to the schedule mentioned in Annexure III for the respective item.

27.3. The bidder shall deliver the equipment/items (Door delivery) inside the premises of SITARC EV Foundation, 369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021, Tamil Nadu, INDIA at good conditions.

27.4. However, the Purchase Committee may provide extension of time if the delay is due to valid reasons as prescribed in Clause 42 under Force Majeure.

## **28. Installation**

28.1. The Equipment/item and accessories are to be installed at Purchaser's Premises.

28.2. The firm has to make the required arrangement for unloading the equipment/ item at site, shifting to the location of installation etc., for which the firm has to bear all the cost. Representative of the firm may visit to quoted equipment/item installation location with prior approval of competent authority to assess these requirements only after receipt of supply/purchase order.

28.3. Supplier shall mention the pre-installation requirements before supply of the equipment/item. SITARC EVF has to facilitate necessary arrangements for the same.

28.4. Safety Compliance to international standards/directives on mechanical, electrical and electronics. Provide list of safety standards/directives for which quoted equipment/item.

28.5. All the deliverables should be compatible with equipment/ item for smooth functioning.

28.6. All the deliverables shall be enlisted in a Packing List which shall be attached with Invoice Copy, Delivery Note and shall be affixed on the packing case of main equipment.

<b>29. Commissioning</b>
<p>29.1. Firm has to provide manuals for commissioning, operating, programming and maintenance in English language.</p> <p>29.2. The firm has to arrange necessary instruments/Equipment's/System to demonstrate the specified accuracies of equipment/item with no cost to Purchaser.</p> <p>29.3. Commissioning should include demonstration of features and operational features.</p>
<b>30. Service</b>
<p>30.1. The supplier shall have the company trained engineers and should have technical expertise with a minimum of three years in the relevant field to render "After Sales Service" within 2 days of request.</p>
<b>31. Insurance Commercial details</b>
<p>31.1. Insurance during transportation to be covered from the time of dispatch of asset till the completion of Installation at the buyer premises. The cost incurred towards insurance shall be considered and included while providing price bid.</p>
<b>32. Training of Technical Personnel</b>
<p>32.1. The suppliers of the machinery/ equipment should provide adequate training free of cost for technical personnel (minimum of 2 persons) of the CFC per equipment including trouble shooting etc., and making them confident of operating the equipment independently.</p> <p>32.2. Training shall be provided at SITARC EVF, 369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore - 641 021.</p> <p>32.3. After final commissioning of equipment/item at premises of Purchaser, a complete training for technical persons (for minimum of 5 Days) in the area of operation, preventive maintenance of system, calibration, installation, customization of software and samples preparation for different items at purchaser's location. The training shall be given at free of cost from the date of commissioning. Completion certificate and balance payment as per the terms will be issued on completion of the training as indicated above.</p>
<b>33. Performance Test</b>
<p>33.1. The Successful bidder demonstrates the performance of the supplied equipment's / instruments in complete conformity with the relevant technical specification and performance as specified in the P.O.</p>

33.2. The demonstration should be done as stipulated by SITARC EVF.
<b>34. Guarantee/Warranty Period</b>
<p>34.1. The bidder shall give warranty for <b>at least one year</b> in respect of items quoted.</p> <p>34.2. During the warranty period, regular servicing/ maintenance should be undertaken at free of charge, including replacement of defective parts/ travel cost, etc. Subsequently, servicing/ maintenance should be undertaken every 4 months by the authorized agency of the manufacturer / supplier.</p> <p>34.3. Delivery of the full replacement or repaired parts shall be provided at free of cost at the factory site without loss of time so that the down time is minimized.</p> <p>34.4. FORM TECH-5 Shall be filled and furnished in the envelope A.</p> <p><b>Note:</b> Provision of warranty for additional years will also be taken into consideration while evaluating the bidder as given in clause 21.1 and information sheet.</p>
<b>35. Annual Maintenance Contract (AMC)</b>
<p><b>Free AMC:</b> The bidder shall cover the system, instrument, equipment and items under maintenance contract (free of cost) for one year after the expiry of warranty period without claiming any additional finical charges from the purchaser.</p> <p><b>Chargeable AMC:</b> AMC cost for additional 2 years, after the expiry of first year free AMC, shall be quoted along with the offer.</p> <p>FORM TECH-8 Shall be filled and furnished in the envelope A.</p> <p><b>Note:</b> It may be noted that the free of charges towards AMC will be also taken into consideration while evaluating the bidder as given in clause 21.1 and information sheet.</p>
<b>36. Calibration</b>
<p>The calibration certificates or reports must issue by an ISO/IEC 17025:2017-accredited calibration laboratory. These documents verify both the accuracy and the calibration of the sensors and should be provided as required for all measuring instruments and equipment's to ensure compliance with internationally recognized standards.</p> <p><b>Free Calibration:</b> The bidder shall cover the instrument, equipment and items which are covers under calibrations for one year.</p>

**Chargeable Calibration:** Calibration charges, in case of chargeable basis, for additional 2 years, after the expiry of first year free calibration, shall be quoted along with the offer.

FORM TECH-9 Shall be filled and furnished in the envelope A.

**Note:** It may be noted that the free of charges towards calibration will be also taken into consideration while evaluating the bidder as given in clause 21.1 and information sheet.

### **37. Software Licenses**

**37.1.** The bidder shall provide any required software and its corresponding license for operating the equipment.

**37.2.** All software / firmware supplied shall be licensed with license key and shall have the licence at free of cost for three years from the date of commissioning. Software / firmware updating option shall be provided.

**Note:** Software / Firmware upgradation support will be also taken into consideration while evaluating the bidder as given in clause 21.1 and information sheet. FORM TECH-10 Shall be filled and furnished in the envelope A.

### **38. Terms and Conditions**

**38.1.** In view of high accuracy requirement, it is mandatory that equipment / item should be assembled in original equipment/item manufacturer's own plant. All the bought-out items shall be of standard/OEM make.

**38.2.** Machine should be brand new and modified equipment/item will not be acceptable. Such case, if it is found at any point of time, Purchaser will reject the equipment/item and will be intimated to the respective authorities.

**38.3.** The successful bidder has to provide total weight, power supply requirement & layout drawings showing overall dimensions of equipment/item within 30 days after receiving supply purchase order.

### **39. Termination of Contract**

**39.1.** SITARC EVF reserve the right to terminate the contract at any time during the validity period on account of non-fulfilment of contractual obligation.

### **40. Additional Specifications/Feature**

**40.1.** Any specifications or features provided over and above the requirements of SITARC EVF, should be clearly highlighted by the supplier in the attached format in the TD Annexure II and

submitted with the bidding document. Due consideration shall be provided for additional specification/features.

**41. Compliance Statement**

41.1. Compliance statement (as per format in FORM TECH-4 Compliance Statement for Technical Specifications) needs to be submitted by the bidder along with the tender document.

41.2. All documents must be in English and should be in both hard and soft copies.

**E. OTHER TERMS AND CONDITIONS****42. Force Majeure**

42.1. Failure or delay in the part of tenderer for supply due to force majeure causes enumerated here under shall be considered, provided the supplier produces documentary evidence.

42.2. Any cause which is beyond the reasonable control of the tenderer.

42.3. Natural phenomena, such as floods, drought, earthquakes and epidemics.

42.4. Act of any Govt. Authority, domestic or foreign, such as wars declared or undeclared quarantines, embargoes licensing control on production or distribution restrictions.

42.5. Accident and disruptions such as fire, explosion, increase in power cut with respect to date of tender opening etc.,

42.6. Strikes, slow down and lockouts.

42.7. The cause of force majeure condition will be taken into consideration only if the supplier notifies within 30 days from the occurrence of such eventualities. The purchaser shall verify the facts and grant such extension as the facts justify. For extension due to force majeure conditions, the supplier shall submit his representation with documentary evidence for scrutiny by the purchaser and decision of the purchaser shall be binding on the time. However, the price quoted by the bidder and accepted by the Purchaser shall remain firm during such extended period.

42.8. For the matter of clarity, Force Majeure shall not have any bearing on the price.

**43. Payment Procedure**

43.1. Cost details are to be filled up in the prescribed format as given in FIN – 3 for the equipment and items as applicable, imported / indigenous as the case may be, indicating therein total charges.

43.2. All accessories and startup kit required for installation and commissioning of the equipment are to be specified and to be included in the INR value on door delivery basis. (The equipment/ item will be placed in SITARC EVF. If any short supply is noticed at a later stage, the supplier will take responsibility for supply of the same at free of cost which includes packing and forwarding charges).

43.3. All consumable and spare parts for 3 years and replacement of the broken/damaged parts during without any charge. However, if it is got damaged during the course of use, the cost for the same will borne by SITARC EVF.

43.4. Broken / damaged parts shall be replaced by the supplier with no additional charges during the guarantee / warrantee period. The list of those items should clearly mention in a separate sheet with cost. These items should not be included in the CIF value.

**43.5. The Terms of Payment:**

- i. 30% of Basic price as an advance subject to the submission of BG by the tenderer (supplier) equivalent to the amount to be paid.
- ii. 40% against supply of the equipment's and acceptance by the Authority at the SITARC EVF, Coimbatore subject to the submission of BG by the tenderer (supplier) equivalent to the amount to be paid. The BG obtained towards the amount paid for advance (i) shall be released proportionately. However, as mentioned in Cl.26 a pre-dispatch inspection by the SITARC EVF technical team (4 members) shall be carried out before dispatch of the said item as mentioned in the respective PO.
- iii. 20% against successful completion of installation, commissioning, performance testing, training and acceptance by the Authority subject to the submission of BG by the tenderer (supplier) equivalent to the amount to be paid. However, the BG obtained towards the amount paid for supply of equipment (ii) shall be released proportionately.
- iv. 10% after completion of 3 months trial run and acceptance by the Authority subject to the submission of BG by the tenderer (supplier) equivalent to the amount to be paid. However, the BG obtained towards the amount paid for successful completion of installation, commissioning, performance testing, training (iii) shall be released proportionately. The BG obtained towards the amount paid for (iv) shall be released after the expiry of warranty period.

**44. Saving Clause**

44.1. No suit, prosecution or any legal proceedings shall lie against SPV for anything that is done in good faith or intended to be done in pursuance of tender. In the event of any dispute arising out of the tender such dispute would be subject to the jurisdiction of the Civil Court Coimbatore.

44.2. If any dispute arises in the contract, the same will have to be finalized in the court of Coimbatore jurisdiction.



**45. Penalty Clause**

45.1. If the bidder fails to install and commission the respective item within the stipulated time or perform the services within the time period specified in the contract, the penalty at **1 %** per week or part thereof will be imposed subject to a maximum of **10 %** of the total cost of work order unless the delay is due to recognised force majeure conditions.

45.2. Any amendments in the purchase order are addressed to the purchase committee within 5 days from the date of issue of purchase order. Delivery period will be remaining unchanged.

**46. Disputes Resolution**

**Amicable Settlement** - The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Agreement or the interpretation thereof. In the event a dispute, differences or claim arises in connection with the interpretation or implementation of this agreement, the aggrieved party shall issue a written notice setting out the Dispute/ differences or claim to the other party, parties shall first attempt to resolve such dispute through mutual consultation. If the dispute is not resolved as aforesaid within 15 days from the date of receipt of written notice, the matter will be referred to the Purchase Committee, whom will take decision within 30 days after such reference. If the dispute is still not resolved the matter will be referred for Arbitration.

**Arbitration** - In case the dispute is not resolved, any party may issue a notice of reference, invoking resolution of disputes through arbitration in accordance with the provisions of the Arbitration Conciliation Act, 1996. The arbitral proceedings shall be conducted by a sole arbitrator that may be appointed with the consent of Parties to such dispute. If there is no agreement among the parties to the identity or appointment of such sole arbitrator within 30 days of issue of notice of reference, then the arbitral proceedings will be conducted by a panel of three arbitrators, one arbitrator to be appointed by the Authority and other appointed by Vendor and the third arbitrator to be mutually appointed by the other two arbitrators in accordance with provisions of Arbitration and Conciliation Act, 1996. Arbitration proceedings shall be conducted in and the award shall be made in English language. Arbitration proceedings shall be conducted in Coimbatore, Tamil Nadu and following are agreed. The arbitration award

shall be final and be binding on the Parties, and the Parties agree to be bound thereby and to act accordingly.

The arbitrator may award to the Party that substantially prevails on merit, its costs and reasonable expenses (including reasonable fees for counsel). When any dispute is under arbitration, except for matters under dispute, the Parties shall continue to exercise their remaining respective rights and fulfil their remaining respective obligations under this Agreement.

#### **47. Disqualification**

**The bid is liable to be disqualified if:**

47.1. Not submitted in accordance with this Tender document.

47.2. During validity of the bid or its extended period, if any, the bidder increases his quoted prices.

47.3. During the bid process, if a bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.

47.4. Bid received in incomplete form or not accompanied by bid security amount/all requisite documents.

47.5. Bid received after due date and time.

47.6. Bidder submits conditional bids.

47.7. Bidder indulges in canvassing in any form to win the contract and/ or breaches the Integrity and Avoidance of Conflict-of-Interest Pact.

47.8. SITARC EVF reserves the right to accept or reject any tender or reject all tenders without giving any reason whatsoever for their decision.

47.9. Tenders liable to be rejected are those in which any of the prescribed particulars / information is either missing or incomplete in any respect and / or if the prescribed conditions are not fulfilled. Tenders which are found to be techno commercially non-responsive shall be rejected and their commercial details shall not be considered.

47.10. If the validity of the tender is not up to 6 Months from the date of submission of tender document, the tender is liable for rejection.

47.11. If the tender document is not duly signed by the authorized person on all pages, the tender is liable for rejection.

47.12. Before submission of the tender, the prospective bidders are expected to examine techno commercial specifications of the equipment / items required, terms and conditions, etc., given in this tender document. Failure to furnish all information required in the tender document may result in the rejection of the bid.

47.13. It should clearly be noted that all contracts resulting out of entering into a formal agreement / issue of a purchase order for procurement of any item will be interpreted under Indian Laws and for all disputes the jurisdiction will be Coimbatore only. If other than Coimbatore, the bidder will be liable for rejection.

47.14. In the event of non-performance of the contractual provision or failure to affect the supply within the stipulated time or during the extended period and if it is found that the contractor, has not fulfilled the contractual obligation with SITARC EVF in any manner during the currency of the contract or also found on a later date, SITARC EVF reserve the right to disqualify such supplier to participate in the future tender or black list the firm up to maximum period of 3 years.

## F. INFORMATION SHEET

I. General	
ITB Clause	Description
2.1	<b>Name of the Authority:</b> The Director, SITARC EV Foundation <b>Address:</b> 369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021. <b>Method of selection:</b> Quality and Cost Based Selection (QCBS)
2.2	<b>The name of the assignment is: -</b> Supply Installation and Commissioning of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer.
2.3	PBM will take place physically or on line.
II. Preparation of Tenders	
6.1	English language.
9.1 13.1	The Tender shall comprise the following: Compliance sheet to prequalification criteria (Form Pre-Qual-1) Supporting documents for pre-qualification criteria if any FORM TECH-1 FORM TECH-2 FORM TECH-3 FORM TECH-4 FORM TECH-5 FORM TECH-6 FORM TECH-7 FORM TECH-8 FORM TECH-9 FORM TECH-10
13.2	Annexure I Annexure II Annexure III Annexure IV FORM FIN-1 FORM FIN-2

	FORM FIN-3 FORM FIN-4 FORM FIN-5 FORM FIN-6 FORM FIN-7						
10.1 10.2	Tenders must remain valid for 6 months after the Bid Due Date (BDD).						
III. Submission, Opening and Evaluation							
21.1	<p>Criteria, sub-criteria, and point system for the evaluation of the Full Techno commercial Tenders:</p> <p><u>Pre-qualification criteria:</u> As mentioned in the Letter of Invitation.</p> <p>The bids submitted by the bidders who clear the pre-qualification round only will be evaluated as per the criteria provided below:</p> <p><b><u>Evaluation Criteria (100 Points)</u></b></p> <p>A. <u>Experience on Similar Projects (30 Points)</u></p> <table><tr><th>Sl.</th><th>Criteria</th><th>Scoring</th></tr><tr><td>1</td><td><p>Installed / Commissioned three such systems of equal / higher rating (or) specification pertaining to electric vehicle motor test system. The Bidder has to attach the copy of previous supply order and specifications for the corresponding equipments / system in India / Globally in last three financial years (FY 22-23, FY 23-24, FY 24-25).</p><p>The Purchaser reserves the right to depute committee / representatives to check the equipment capabilities as per the purchaser's specification during evaluation of Techno commercial Bid.</p></td><td><ul style="list-style-type: none"><li>• 3 projects (15 points)</li><li>• 4 projects (20 points)</li><li>• 5 projects (25 points)</li><li>• ≥ 6 projects (30 points)</li></ul></td></tr></table>	Sl.	Criteria	Scoring	1	<p>Installed / Commissioned three such systems of equal / higher rating (or) specification pertaining to electric vehicle motor test system. The Bidder has to attach the copy of previous supply order and specifications for the corresponding equipments / system in India / Globally in last three financial years (FY 22-23, FY 23-24, FY 24-25).</p> <p>The Purchaser reserves the right to depute committee / representatives to check the equipment capabilities as per the purchaser's specification during evaluation of Techno commercial Bid.</p>	<ul style="list-style-type: none"><li>• 3 projects (15 points)</li><li>• 4 projects (20 points)</li><li>• 5 projects (25 points)</li><li>• ≥ 6 projects (30 points)</li></ul>
Sl.	Criteria	Scoring					
1	<p>Installed / Commissioned three such systems of equal / higher rating (or) specification pertaining to electric vehicle motor test system. The Bidder has to attach the copy of previous supply order and specifications for the corresponding equipments / system in India / Globally in last three financial years (FY 22-23, FY 23-24, FY 24-25).</p> <p>The Purchaser reserves the right to depute committee / representatives to check the equipment capabilities as per the purchaser's specification during evaluation of Techno commercial Bid.</p>	<ul style="list-style-type: none"><li>• 3 projects (15 points)</li><li>• 4 projects (20 points)</li><li>• 5 projects (25 points)</li><li>• ≥ 6 projects (30 points)</li></ul>					

**B. Sales & Service Support (40 Points)**

Sl.	Criteria	Scoring
1.	On site Guarantee / Warranty (As per the TD, ITB Cl.No.34) - (Max. 10 Points)	1 <sup>st</sup> year: 2 Points 2 <sup>nd</sup> year: 6 Points 3 <sup>rd</sup> year: 10 Points
2.	Annual Maintenance (As per the TD, ITB Cl.No.35) - (Max. 10 Points)	1 <sup>st</sup> year: 2 Points 2 <sup>nd</sup> year: 6 Points 3 <sup>rd</sup> year: 10 Points
3.	Calibration of instruments & equipment's (As per the TD, ITB Cl.No.36) - (Max. 10 Points)	1 <sup>st</sup> year: 2 Points 2 <sup>nd</sup> year: 6 Points 3 <sup>rd</sup> year: 10 Points
4.	Software Upgradation Support (As per the TD, ITB Cl.No.37) - (Max. 10 Points)	Three Years – 4 Points Fourth year – 7 points Five years- 10 Points

**C. Class of Accuracy of the Instrument / Equipment's (20 Points)**

Sl.	Criteria	Scoring
1	Torque and Speed Measurement & Control Accuracy (Max. 10 Points)	For 0.1 Class – 2 Points For 0.05 Class – 5 Points For 0.02 Class – 10 Points
2	Power Measurement Accuracy including current sensor (Max. 10 Points)	For 0.1 Class – 2 Points For 0.05 Class – 5 Points For 0.02 Class – 10 Points

**D. Presentation by Firm (10 Points)**

Vendors shall share their experience in past projects, their approach to Common Facility Centres/ best practices across the globe/ international expertise that shall be leveraged upon/ experience with shared services in clusters/ reasons for success and failure of such shared facilities.

Vendors shall explain their understanding of the objectives of the tender, techno commercial approach, and the methodology they would adopt for implementing the

	<p>tasks to deliver the expected output(s); the degree of detail of such output; and the structure and composition of their team.</p> <p><b><u>The Power Point Presentation (PPT) shall cover the following:</u></b></p> <ul style="list-style-type: none"> <li>a) understanding of requirement (Scope of work, deliverables and business context)</li> <li>b) Detailed approach &amp; methodology for addressing the requirements.</li> <li>c) Plan to meet quality, timelines of deliverables &amp; value proposition.</li> </ul> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• Not more than five highest scoring bidders in the Evaluation Criteria A, B and C will be called for presentation by the Authority. The maximum number of bidders to be shortlisted for the presentation shall be as decided by the Authority, based on the actual scores obtained by the Bidders on the Evaluation Criteria A, B and C. If the quality of submissions is higher, up to five highest scoring bidders will be contacted for document verification. After satisfaction of the Authority regarding the veracity of the claims, the firms will be shortlisted for presentation. This can be as decided by the Authority based on quality and reliability of evidence presented.</li> <li>• Each shortlisted bidder will be requested to make a presentation and will be given a duration of 15-30 minutes for the presentation.</li> <li>• The shortlisted bidders will be required to arrange live or recorded video testimonials (maximum of 3 unique clients) by their clients which reflect the quality, utility and business benefit of the services provided by the experts brought in or by the bidders. Each testimonial will be for a maximum of 2-3 minutes and will be brief and to the point.</li> <li>• The shortlisted bidders can request the Authority through an e-mail to send a request to their clients for an online testimonial with their contacts, if so desired by the Bidders' clients. For this, at the time of submission of pre-bid queries, the shortlisted bidders can provide a list of such clients providing a video testimonial, (who will require a formal request from the Authority).</li> <li>• Not more than five bidders who score the highest in Evaluation Criteria A, B, C and D will be shortlisted after the presentation and ranked in descending order of their scores obtained. However, this number can be relaxed by the Authority based on the scores obtained by the bidders on the Evaluation Criteria A, B and C. The Commercial bids of only these qualified bidders will be opened.</li> <li>• Assessment for empanelling of firms/ experts also will be done by the Authority during the presentation.</li> </ul>
--	---

22.2	<ul style="list-style-type: none"><li>• Tenders for the “Qualified Vendor” during the process of evaluation will finally be ranked accordingly to their combined score of Techno commercial evaluation (Tc) and Price bid offer (Pb) scores.</li><li>• <b>Pb</b> will be calculated based on project cost as shown in FORM FIN-3.</li><li>• The weightage given to techno commercial (Tw) and price bid (Pw) Tenders are as follows: Tw =80% and Pw = 20%.</li><li>• Combined Total Score = (Tc x Tw) + (Pb x Pw).</li><li>• The second, third, fourth and fifth as the case may be highest bidders shall be kept in reserve and may be invited for negotiation in case the first ranked or higher ranked bidder withdraws or fails to comply with requirements, as the case may be.</li><li>• In the event, if the combined total score is tied then bidder securing the higher techno commercial score will be considered for award of the project.</li><li>• The Purchase Committee reserves the right, if desires, to negotiate with the bidders for finalization of the bidder for award of purchase order.</li></ul>
------	--



**Section3: Techno commercial Tender – Standard Forms**

FORM	DESCRIPTION
PRE-QUAL-1	Compliance sheet to Prequalification Criteria
TECH-1	Techno commercial Bid Submission Form.
TECH-2	Tenderer Information Sheet
TECH-3	Bidder's Relevant Experience
TECH-4	Compliance sheet to Technical Specification
TECH-5	Guarantee / Warranty of Affirmation
TECH-6	Declaration of Undertaking
TECH-7	Bill of Material without Cost
TECH-8	Declaration for Annual Maintenance Contract
TECH-9	Declaration for Calibration
TECH-10	Declaration for Software / Firmware upgradation
Annexure I	Declaration
Annexure II	Additional Specification / Features
Annexure III	List of Items to be Procured under this tender
Annexure IV	Technical Specification / Requirements of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer.

**Note:** The bidders may note that their submissions should be arranged appropriately and pages numbered continuously by hand or electronically before submitting the Tender Document. The accuracy and non-repetitive page numbering are crucial in helping the Authority to navigate through the documents easily. If the pages are not numbered and noted correctly in the forms in the submissions, the Authority is not responsible if some detail of relevance is missed while evaluating the submission.

**PRE-QUAL-1**  
**Compliance Sheet to Pre-Qualification Criteria**

SI No	Descriptions	Compliance to conditions (YES or NO)	In case of non-compliance deviation from the conditions to be indicated in unambiguous term
1.	Bidder should be registered in India under the Companies Act/ LLP Act and should have been in existence for at least three years on the date of publication of tender. In case of the proprietorship firm, certificate from CA regarding proprietorship status will be attached along with the registered GST Certificate.		
2.	The average annual turnover of the tenderers in the previous <b>three</b> Commercial/ accounting years (FY 22-23, FY 23-24, FY 24-25) shall be <b>5 Crores</b> .		
3.	<p>The bidder should have completed a minimum of three electric vehicle motor test systems, The capacity is equal (or) higher than that of the tendered item, during the financial years (FY 2022-23, FY 2023-24, FY 2024-25, and FY 2025-26) and at least one during the last or current financial year in India / Global.</p> <p>Note: The Tenderer has to quote with a copy of previous supply order. The Authority reserves the right to depute committee/Reps to check the instrument, equipment and system capabilities.</p>		
4.	The Bidder should not have been blacklisted by Government of India/ Tamil Nadu/ other state governments in India or undertakings/ entities under/ owned by these governments as on bid submission date.		

**Note:** The Bidder shall furnish the appropriated supporting documents for verification

**FORM TECH-1**  
**Techno - Commercial Bid Submission Form.**

---

Date:

To:

The Director,

SITARC EV Foundation (SITARC EVF),

369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021.

E-mail: sitarcev@sitarc.com, sitarcevclus@gmail.com;

Ref: SITARC EV Foundation - Tender No. SEVF/TEQ/DYN/2025-26/001

Dear Sir,

We, the undersigned, declare that:

- a. We have examined and have no reservations to the Tender Documents, including Addenda;
- b. Our Tender shall be valid for a period of 6 months from the date fixed for the Tender submission deadline in accordance with the Tender Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- c. If our Tender is accepted, we commit to accept terms with regard to Performance Guarantee/Warranty in accordance with the Tender Documents;
- d. We are not participating, as a Tenderer, in more than one Tender in this Tender process for the same item in any conflict of interest with regard to the project;
- e. Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, has not been declared ineligible by SITARC EVF;
- f. We understand that this Tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us.
- g. We understand that you are not bound to accept the highest ranked Tender or any other Tender that you may receive;
- h. We declare that the certified Photostat copies of documents and certificates submitted to support our Tender are true copies of the originals of such documents and certificates. Also, in case of ISO 9001/ BS EN ISO 9001/ IS certificates, we confirm that we have verified that the certificate issuing authority has the accreditation to issue the same and the materials offered conform to the above specified product standard certificate;

- i. We further agree to the right of SITARC EVF to debar us from participating in all future Tenders in the event that the copies of certificates or documents are found to be forged or tampered with;
- j. We also undertake 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", and
- k. We hereby confirm that this Tender complies with the Eligibility, Tender Validity and EMD required by the Tender documents.
- l. We hereby confirm that we have enclosed two copies of tender document duly signed with office seal in all pages.

Dated this \_\_\_\_ day of 2025 Signature \_\_\_\_\_ in

the capacity of \_\_\_\_\_

Duly authorized to sign the Tender for and on behalf of \_\_\_\_\_

\_\_\_\_\_  
(in BLOCK Letters)

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

\_\_\_\_\_

Company Seal: \_\_\_\_\_

**Witness 1**

Name :

Address:

Occupation:

**Witness 2**

Name:

Address:

Occupation:

**FORM TECH-2**  
**Tender Information Sheet**

---

All individual firms' partner of the bidding firm for this Contract should complete the information in this sheet.

Firm / Company		
Name of firm/ company		
Place of incorporation/ registration of firm		
Year of incorporation/ registration of firm / company		
Head Office Address (incl. Contact, Tel, Mail) of firm / company		
Regional Office Address (incl. Contact, Tel, Mail) of firm / company		
Local Office Address (incl. Contact, Tel, Mail) of firm / company		
Main Lines of Business		
1.		
2.		
3.		
4.		
5.		
6.		

**FORM TECH-3**  
**BIDDER'S RELEVANT EXPERIENCE**

---

Form TECH-3: a brief description of the Bidder's organization and an outline of the recent experience of the Bidder that is most relevant to the tendered item.

Tenderer should provide information on their relevant work experience for this project limited to the below mentioned.

**A - Bidder's Organization**

1. Provide here a brief description of the background and organization of your company.
2. Attach the organization's incorporation certificate / organization's incorporation as proof of existence.
3. In case the bidder is Original Indian Equipment Manufacturer, the bidder is to submit a self- declaration on their letter head confirming that they are regular in manufacturing and supplying three similar items, as asked in this tender, for the FY 22-23, FY 23-24, FY 24-25, and FY 25-26.  
Or
4. In case the bidder is Authorized Distributor/Dealer of Indian OEM, the bidder is to attach self- certified valid authorized distributorship/dealership license from OEM who should have valid ISO certificate and shall be engaged in regular manufacturing and supply of similar machine for the FY 22-23, FY 23-24, FY 24-25, FY 25-26.

**B - Bidder's Experience**

1. List only previous similar assignments successfully completed.
2. List only those assignments for which the Bidder was legally contracted by the Client as an entity. The Bidder should substantiate the claimed experience by presenting copies of purchase orders as an annexure to the Tender.

SITARC EV FOUNDATION

Sl. No	Name of Firm	Date of Purchase	Location of Installation	Make & Model of Item Supplied	Item Cost in Lakhs (INR)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Signature of Tenderer/ Authorized Signatory

Seal:

Date:

### Compliance sheet to Technical Specifications

"The supplier shall comply with the technical specifications as per Annexure-IV of the tender document (TD)"

SI No	Specifications	Compliance to specification (YES or NO)	In case of non-compliance, deviation from the specifications shall be indicated in unambiguous term
1.	1.Type of Test System		
2.	2.Scope of Measurement		
3.	Requirements		
3.1.	Capacity of Test System		
	3.1.1. Loading System 1		
	3.1.2. Loading System 2		
3.2.	Test Requirements		
3.3.	Test Bed Requirements		
3.4.	Environmental Chamber Requirement		
3.5.	Power Supply Requirement (Both A & B)		
3.6.	Power Analyser Requirement (Both A & B)		
3.7.	Software and Test Report Requirements		
3.8.	Hardware Requirements		
3.9.	Data Acquisition System		
3.10.	Safety Protection Measure		
4.	List of deliverables along with the System		
5.	Calibration of Dyno		
6.	General		



GUARANTEE / WARRANTY OF AFFIRMATION

---

Date:

To:

The Director,  
SITARC EV Foundation (SITARC EVF),  
369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO,  
Coimbatore – 641 021,  
E-mail: sitarcev@sitarc.com, sitarcevcl@sitarc.com;

Tender No. SEVF/TEQ/DYN/2025-26/001.

We, the undersigned, hereby well and truly affirm that the information provided in the Tender documents and the supporting documentary evidence submitted along with the tender are true and correct to the best of our knowledge and belief.

We also affirm that our supply of goods or works towards this project is no party to consulting services for this project, either to the parent company or its affiliates.

**We further affirm that the warranty towards this project is for one year by default and providing an offer for an additional warranty of \_\_\_\_\_ (in words) years.**

We understand that, in the event it is proved that the documents submitted by us stated above are not authentic, fraudulent, falsified and forged or tampered to misrepresent facts or the supplier of goods or works is a party to consulting services of the project either as parent company or its affiliates, our tender will be rejected and the Tender security will be forfeited.

---

Authorized Signatory

---

Seal

Date

FORM TECH-6  
Declaration of Undertaking

---

Date:

To:

The Director,  
SITARC EV Foundation (SITARC EVF),  
369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO,  
Coimbatore – 641 021.  
E-mail: sitarcev@sitarc.com, sitarcevcl@sitarc.com;

Tender No. SEVF/TEQ/DYN/2025-26/001

The parties to the awarding procedure emphasize the importance of a free, fair and competitive awarding procedure that precludes abuse. In this respect our company thus far have not offered or granted any inadmissible advantages either directly or indirectly to the persons in connection with this Tender, nor shall it offer or grant any such incentives or rewards in the present awarding procedure or, in the case of an award, during the subsequent execution of the Agreement.

---

\_\_\_\_\_ [name of the company] shall  
inform the employees of their respective duties and their commitment to observe this self-imposed obligation and to abide by the laws of Union of India and countries of origin of procurements and services.

---

Authorized Signatory

Seal

Date

**BILL OF MATERIAL WITHOUT COST**

To execute a supply as per a tender, the bidder should provide comprehensive details of all materials required.

Supply of \_\_\_\_\_ to SITARC EV Foundation (SITARC EVF), 369/188, 189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021, techno commercial offered for the supply, installation and commissioning of equipment/item as per Technical Specifications.

The bidder shall provide the BOM details as per the below categories A, B, C and D.

**A. Loading System:**

Sl. No	Range of Test beds	Range	Make	Item Qty
1.	Loading System-1			
2.	Loading System-2			
3.	Environmental Chamber			
4.	Programmable, Bi-Directional DC Power Source cum Battery Emulator – 18 kW			
5.	Programmable, Bi-Directional DC Power Source cum Battery Emulator – 45 kW			

The above-mentioned items are as per the specification given in Annexure IV of TD.

**B. Measuring Instrument and Equipment's:****i. Power Analyser:**

Sl. No	Make	Model	Range	Class of accuracy	Item Qty
1.					
2.					

ii. Current Sensors:

Sl. No	Make	Model	Range	Class of accuracy	Item Qty
1.					
2.					

iii. Torque Transducer:

Sl. No	Make	Model	Range (Nm)	Class of accuracy	Item Qty
1.			0-10		
2.			0-100		
3.			0-200		
4.			0-500		

iii. Test Automation Control Panels:

Sl. No	Description	Item Qty
1.	Test Automation Control Panel for Loading System-1	
2.	Test Automation Control Panel for Loading System-2	

C. Software & Data Acquisitions:

The bidder shall provide details mentioned below, if any items which are not mentioned below the bidder shall be submit those details also.

Sl. No	Descriptions	Item Qty
1.	Software & Data Acquisition System for Loading System-1	
2.	Software & Data Acquisition System for Loading System-2	
3.	CAN I/O Modules	
4.	Test bed Safety Systems	
5.		
6.		
7.		
8.		

**D. Other Equipment & Accessories:**

The bidder shall provide details mentioned below, if any items which are not mentioned below the bidder shall be submit those details also.

Sl. No	Descriptions	Make	Model	Item Qty
1.	Milli Ohm Meter			
2.	Vibration Sensor & Cables			
3.	Noise Sensor			
4.	Temperature Sensor			
5.	Drive Panel, Inverters / Regenerative units			
6.	Mounting Brackets for E-Motors (Hub & Mid Drive)			
7.	Mounting Brackets for foot and face motor			
8.	Locked Rotor Arrangements			
9.	Coupling Sets			
10.	Laser shaft alignment tool			
11.	Standard accessories			
12.	Pre-installation tool kit			
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

**Note:** The bidder shall ensure that all detailed technical specifications, torque-speed-power graphs to demonstrate the capabilities of both loading systems, catalogues, brochures, drawings, etc., shall be furnished by the bidder for each instrument, equipment, and item.

Declaration for Annual Maintenance Contract

---

Date:

To:

The Director,  
SITARC EV Foundation (SITARC EVF),  
369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641  
021.  
E-mail: [sitarcevf@sitarc.com](mailto:sitarcevf@sitarc.com), [sitarcevclus@gmail.com](mailto:sitarcevclus@gmail.com);

Tender No. SEVF/TEQ/DYN/2025-26/001.

We, the undersigned, hereby well and truly affirm that the information provided in the Tender documents and the supporting documentary evidence submitted along with the tender are true and correct to the best of our knowledge and belief.

We affirm that the cost for Annual Maintenance Contract towards this project is FREE for first year, offering the cost of AMC for second year at **FREE \*/ CHARGEABLE \*** basis and for third year at **FREE \*/ CHARGEABLE \*** basis.

**\*Note:** The bidder shall strikeout whichever is **Appropriate / Not Applicable**, Bidders are requested to carryout filling this form carefully as the information filled in this form will be taken for evaluation process as mentioned in the information sheet CI.21.1 of the TD.

---

Authorized Signatory

---

Seal

Date

Declaration for Calibration

---

Date:

To:

The Director,  
SITARC EV Foundation (SITARC EVF),  
369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641 021.

E-mail: [sitarcevf@sitarc.com](mailto:sitarcevf@sitarc.com), [sitarcevclus@gmail.com](mailto:sitarcevclus@gmail.com);

Tender No. SEVF/TEQ/DYN/2025-26/001.

We, the undersigned, hereby well and truly affirm that the information provided in the Tender documents and the supporting documentary evidence submitted along with the tender are true and correct to the best of our knowledge and belief.

We affirm that the Calibration Charges towards this project is FREE for first year, offering the cost towards calibration for second year at **FREE \*/ CHARGEABLE \*** basis and for third year at **FREE \*/ CHARGEABLE \*** basis.

**\*Note:** The bidder shall strikeout whichever is **Appropriate / Not Applicable**, Bidders are requested to carryout filling this form carefully as the information filled in this form will be taken for evaluation process as mentioned in the information sheet CI.21.1 of the TD.

---

Authorized Signatory

---

Seal

Date

Declaration for Software / Firmware Upgradation

---

Date:

To:

The Director,  
SITARC EV Foundation (SITARC EVF),  
369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641  
021.

E-mail: [sitarcevf@sitarc.com](mailto:sitarcevf@sitarc.com), [sitarcevclus@gmail.com](mailto:sitarcevclus@gmail.com);

Tender No. SEVF/TEQ/DYN/2025-26/001.

We, the undersigned, hereby well and truly affirm that the information provided in the Tender documents and the supporting documentary evidence submitted along with the tender are true and correct to the best of our knowledge and belief.

We affirm that the Software / Firmware upgradation support towards this project is at **FREE of cost for 3\* / 4\* / 5\* Years.**

**\*Note:** The bidder shall strikeout whichever is **Appropriate / Not Applicable**, Bidders are requested to carryout filling this form carefully as the information filled in this form will be taken for evaluation process as mentioned in the information sheet CI.21.1 of the TD.

---

Authorized Signatory

---

Seal

Date



ANNEXURE I  
DECLARATION (GENERAL)

---

I / We \_\_\_\_\_ having our office at declare that I / We have never been blacklisted by any State Government / Central Government / or any State / Central PSU. Further certify that I/We give our acceptance for all tender conditions. The Tender copy is attached duly signed in all the Pages with Seal.

Signature:

Name:

Designation:

Address of the Tenderer:

Seal of Tenderer:

Date:

Place:

ANNEXURE II  
ADDITIONAL SPECIFICATION / REQUIREMENTS

---

Sl. No.	Additional Specifications/Features Provided

## ANNEXURE III

List of Item to be procured under this tender

---

Sl. No	Name of the Equipment's / System	Qty	Delivery Schedule form the date of issue of PO	Installation, commissioning of the system., acceptance test, etc	For Techno commercial Specification / Requirements Refer
1	Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer as a Loading Device.	1 Set	Maximum of 6 Months	Maximum of 2 Months.	ANNEXURE IV

## ANNEXURE IV

**TECHNICAL SPECIFICATION / REQUIREMENTS OF FULLY AUTOMATED ELECTRIC  
VEHICLE MOTOR TEST SYSTEM USING REGENERATIVE TYPE DYNAMOMETER**

---

The test system shall consist the following instruments, equipment and supporting items:

Sl. No	Description
	<p>Fully Automatic Electric Motor Test System (using Regenerative Type Dynamometer as a loading device) suitable for testing of BLDC (Brushless DC) hub motors, Permanent Magnet Synchronous Motor (PMSM), Radial and Axial flux Motors Switched Reluctance Motors (SRM), Synchronous Reluctance Motors (SynRM) and Induction Motors as per relevant National / International Standards (wherever applicable).</p> <p>The system shall also support for the testing of low speed-high torque and high speed – low torque and customized list of tests, so as to carry out certain specific tests on the motor alone or combined motor with controller, where test can be performed with either dedicated controller or universal controller for R&amp;D work etc.</p>
1.	<p><b><u>Type of the Test System:</u></b></p> <p>Fully Automatic Regenerative Type Dynamometer Test System – 1 Set (Loading System 1 and 2)</p> <p>Regenerative Dynamometer shall be suitable for bi-directional operation.</p>
2.	<p><b><u>Scope of Measurement:</u></b></p> <p>The determination of power, efficiency and dynamics of an electric motor is based on the measurement of</p> <p><b><u>Electrical Quantities:</u></b></p> <ul style="list-style-type: none"> <li>• Current</li> <li>• Voltage</li> <li>• Power</li> <li>• Back EMF</li> <li>• Power Factor</li> <li>• Harmonic Content</li> </ul> <p><b><u>Mechanical Quantities:</u></b></p> <ul style="list-style-type: none"> <li>• Torque</li> <li>• Rotation Speed (CW/CCW)</li> <li>• Direction of Rotation</li> <li>• Angle of Rotation</li> </ul> <p><b><u>Temperature:</u></b></p> <ul style="list-style-type: none"> <li>• Test DUT temperatures (Motor/controller/ambient, etc.) during the continuous/normal test run or during freely definable load cycles or in various test modules.</li> </ul>

Sl. No	Description
	<p><u>Vibration &amp; Noise:</u></p> <ul style="list-style-type: none"> <li>For the detection of system errors, such as bearing damages, imbalances, etc., to prevent consequential damages that could occur during measurement.</li> <li>Suitable sensors shall be embedded for real time monitoring of vibration and noise of the MUT and Test bed while system is in operation.</li> </ul> <p><u>Video, Raw data and Visual Analysis</u></p> <ul style="list-style-type: none"> <li>High-speed video recording of the motor during operation</li> <li>All measurements must be timestamped to ensure precise alignment with the video feed and other data streams.</li> </ul> <p><b>Note:</b> Along with offer, The technical documents pertaining to all measurement devices and power supply units shall be submitted.</p>
<b>3.</b>	<b><u>Requirements</u></b>
3.1.	<p><b><u>Capacity of the Test System:</u></b></p> <p><b>3.1.1. <u>Loading System 1:</u></b></p> <p>Power: 0.1 kW – 11.0 kW</p> <p>Rated Torque: 130 Nm</p> <p>Peak Torque: 280 Nm (Available for at least min of 15 Sec)</p> <p>Speed Range: 1 – 12000 RPM</p> <p>Min Speed: 1 RPM</p> <p>Rated Speed: 2700 RPM</p> <p>Max Speed: 12000 RPM</p> <p>Insulation Class: H</p> <p>Cooling Type: Forced Air Cooling (or) Water Cooling</p> <p>Degree of Protection: ≥IP 54</p> <p><b>3.1.2. <u>Loading System 2:</u></b></p> <p>Power: 1.0 kW - 30 kW</p> <p>Rated Torque: 200 Nm</p> <p>Peak Torque: 400 Nm (Available for at least min of 15 Sec)</p> <p>Speed Range: 1 – 15000 RPM</p> <p>Min Speed: 1 RPM</p> <p>Rated Speed: 1500 RPM</p> <p>Max Speed: 15000 RPM</p>

Sl. No	Description
	<p>Insulation Class: H</p> <p>Cooling Type: Forced Air Cooling (or) Water Cooling</p> <p>Degree of Protection: <math>\geq</math>IP 54</p> <p><b>Note: "The supplier shall furnish a torque-speed-power graph demonstrating the capabilities of both loading systems (the regenerative dynamometer)."</b></p>
3.2.	<p><b><u>Test Requirements:</u></b></p> <p>The motor test bench shall automatically (or) manually test the performance and other characteristics, endurance test, test in accordance with Indian Drive Cycle (IDC), WMTC (World Motor Test Cycle) / road load simulations. A robotic arm-based auto throttling system (or) servo based throttling system shall also be available to avoid human intervention and facilitate the repeatability of the tests to accommodate IDC, WMTC and customer specific requirements.</p> <p>The test bench shall accommodate customized tests and measure power, torque, speed, temperature and other parameters. The system shall provide the motor performance characteristics, Speed – Torque Characteristics, Co-relation curve and any other characteristics as and when required.</p> <p><u>Test Requirements are listed as below:</u></p> <ol style="list-style-type: none"> <li>1. Complete load performance testing: Torque, Speed, Current, Efficiency, Power Input, Power Output test of motor with controller.</li> <li>2. Automatic &amp; Manual Temperature rise test of motor with controller.</li> <li>3. Efficiency map test.</li> <li>4. Motor with controller maximum speed test.</li> <li>5. No Load tests.</li> <li>6. Development and matching optimization test of motor and controller powertrain.</li> <li>7. Accelerated response test.</li> <li>8. Testing in accordance with nominal operating modes S1-S10 from standard IEC /EN 60034-1</li> <li>9. Torque response test (Cogging, ripple, locked rotor, pull up &amp; out)</li> <li>10. Torque Ripple Measurements at Low RPM &amp; at High RPM</li> <li>11. Endurance test of steady-state cyclic loading</li> <li>12. Back EMF Constant <math>K_E</math> and waveform</li> <li>13. Open Circuit Back EMF</li> <li>14. Drive train cycle simulation (IDC, WMTC)</li> <li>15. Road Load Simulation (RLS)</li> <li>16. <math>L_d/L_q</math>.</li> <li>17. Stall Torque Ripple vs. Degree.</li> <li>18. Torque Ripple at Low Speed.</li> </ol>

Sl. No	Description
	<p>19. Torque and Speed Spectrum at Certain Load Condition (Torque Ripple)</p> <p>20. Vibration &amp; Noise test.</p> <p>Input parameters provided for the test (e.g., load settings, environmental conditions, and operational constraints) must be logged automatically and the system should support manual or automated entry of test configurations with validation mechanisms to prevent errors. All logged input parameters shall be included in the final test report.</p>
3.3.	<p><b><u>Test Bed Requirements:</u></b></p> <p>Two separate beds shall be provided for each loading system. The test bed height shall be at a height of 500 mm. Mounting frame for Dyno and other accessories. A suitable and modular mounting mechanism has to be provided to facilitate various types of motors. In general, the test bed shall have motorized three axis servo motor-based controller movement for different heights.</p> <p>The test bed shall have the provisions to fix and couple the EV motors of mid mount and in wheel mount (Hub Motor), general purpose motors of foot, face and flange mount constructions. A suitable sturdy "L" bracket arrangements ensuring perfect alignment shall be provided. Supply couplings are perfectly sized and balanced to ensure the error free alignment/mounting.</p> <p>The test bed shall have the flexibility to couple special purpose motors also.</p> <p>All mechanical arrangements shall ensure perfect alignment for vibration free running. A laser tool and vibration sensor embedded arrangement for ensuring the perfect alignment is preferable.</p> <p>Load carrying capacity of the Device Under Test bed 1: 100 kg load maximum. Load carrying capacity of the Device Under Test bed 2: 300 kg load maximum.</p> <p>Suitable vibration pads and vibration alarm for test bed to monitor vibration while system is in operation.</p> <p>The test bed shall have the provision to attach the Environmental Chamber to enclose the Device Under Test portion alone and detach if not required. For which the requirement is given in 3.4 (Environmental Chamber) below.</p> <p>Note: "The supplier must provide drawings of the mounting adaptor and a document explaining them so that these can be shared with the companies that will use this system."</p>
3.4.	<p><b><u>Environmental Chamber Requirement:</u></b></p> <p>The chamber shall have the facility to carry out steady state, cyclic temperature and humidity tests.</p> <p>Dimension of the Chamber: to be decided based on the size of the dyno test bed.</p> <p>Temperature Range: - 40 °C to +150 °C</p>

Sl. No	Description
	<p><u>Rate of Change of Temperature: -</u></p> <p>Heating: Average 4°C/min Empty Chamber.</p> <p>Cooling: Average 4°C/min Empty Chamber.</p> <p>Humidity: 10% to 98% <math>\pm</math>3% RH limited by minimum</p> <p>Door: Full front and rear opening door, double walled insulated and interior Lined with stainless steel.</p> <p>Gasket: Double gasket, one on the chamber and one on the door.</p> <p>Hinges &amp; Latches: Heavy duty hinges with toggle type locking arrangement</p> <p>Mounting: Trolley type mounting with wheels for portability</p> <p><u>Note:</u></p> <p>The same chamber shall be used for both the loading system 1 and loading system 2. Hence, an extra door shall be provided and attached with either of the loading system.</p>
3.5.	<p><b><u>Power Supply Requirement:</u></b></p> <p><b><u>E. Type of Supply:</u></b> Programmable, Bi-Directional DC Power Source cum Battery Emulator for Loading System-1.</p> <p>Power: 18 kW</p> <p>Voltage Range: 1 – 300 V</p> <p>Current Range: 225 A</p> <p>Voltage Rise Time (No load): <math>\leq</math>2ms</p> <p>Voltage Rise Time (Full Load): <math>\leq</math>5ms</p> <p>Voltage Fall Time (No load): <math>\leq</math> 2ms</p> <p>Voltage Fall Time (Full Load): <math>\leq</math>5ms</p> <p>Transient Response Time: <math>\leq</math>2ms</p> <p>Voltage Accuracy: <math>\leq</math>0.1%</p> <p>Current Accuracy: <math>\leq</math>0.1%</p> <p>Power Accuracy: <math>\leq</math>0.2%</p> <p>Communication Protocol: CAN Protocol.</p> <p>Cooling Type: Air Forced ventilation Cooled.</p> <p>Full Protections: OVP, OCP, OPP, OTP, power down protection.</p> <p>Isolation Monitoring: For monitoring isolation faults at output.</p> <p>Ambient Working Temp: 0 - 40°C.</p>



Sl. No	Description
	<p><b>F. <u>Type of Supply:</u></b> Programmable, Bi-Directional DC Power Source cum Battery Emulator for Loading System-2.</p> <p>Power: 45 kW</p> <p>Voltage Range: 1 - 300 V</p> <p>Current Range: 675 A</p> <p>Voltage Rise Time (No load): <math>\leq 2\text{ms}</math></p> <p>Voltage Rise Time (Full Load): <math>\leq 5\text{ms}</math></p> <p>Voltage Fall Time (No load): <math>\leq 2\text{ms}</math></p> <p>Voltage Fall Time (Full Load): <math>\leq 5\text{ms}</math></p> <p>Transient Response Time: <math>\leq 2\text{ms}</math></p> <p>Voltage Accuracy: <math>\leq 0.1\%</math></p> <p>Current Accuracy: <math>\leq 0.1\%</math></p> <p>Power Accuracy: <math>\leq 0.2\%</math></p> <p>Communication Protocol: CAN Protocol.</p> <p>Cooling Type: Air Forced ventilation Cooled.</p> <p>Full Protections: OVP, OCP, OPP, OTP, power down protection.</p> <p>Isolation Monitoring: For monitoring isolation faults at output.</p> <p>Ambient Working Temp: 0 - 40°C.</p> <p>Note: The Current that can be supplied by the system at each voltage has to be specified in the form of a graph or tabular column.</p>
3.6.	<p><b><u>Power Analyzer Requirement:</u></b></p> <p><b>A. <u>For Loading System 1:</u></b></p> <p>Number of Channel: 4 Channels</p> <p>Current measuring Range: 0-500 A</p> <p>Voltage Measuring Range: 0-500 V</p> <p>Measurement Overall Accuracy: <math>\pm 0.05\%</math></p> <p>AC Power Accuracy: <math>\pm 0.02\%</math></p> <p>DC Power Accuracy: <math>\pm 0.02\%</math></p> <p>Sampling Rate: 2 Ms/s in parallel for all channels.</p> <p>Power Bandwidth: up to 1 MHz</p> <p>Voltage Bandwidth: up to 1 MHz</p>

Sl. No	Description
	<p>Current Bandwidth: up to 1 MHz</p> <p>Range Selection: Auto &amp; Manual.</p> <p>Fundamental Frequency: 0.1 Hz to 300 kHz</p> <p>Harmonic Measurement: Up to 500<sup>th</sup> Order.</p> <p>Interface: GPIB, Ethernet, USB 3.0, USB (Peripheral), LAN, RS232/422/485 Adapter and VGA output.</p> <p>Internal Memory: Non-volatile memory of 2 GB.</p> <p>Power Supply: AC 230 V 50 Hz.</p> <p><u>B. For Loading System 2:</u></p> <p>Number of Channel: 4 Channels</p> <p>Current measuring Range: 0-1000 A</p> <p>Voltage Measuring Range: 0-500 V</p> <p>Measurement Overall Accuracy: <math>\pm 0.05\%</math></p> <p>AC Power Accuracy: <math>\pm 0.02\%</math></p> <p>DC Power Accuracy: <math>\pm 0.02\%</math></p> <p>Sampling Rate: 2 Ms/s in parallel for all channels.</p> <p>Power Bandwidth: up to 1 MHz</p> <p>Voltage Bandwidth: up to 1 MHz</p> <p>Current Bandwidth: up to 1 MHz</p> <p>Range Selection: Auto &amp; Manual.</p> <p>Fundamental Frequency: 0.1 Hz to 300 kHz</p> <p>Harmonic Measurement: Up to 500<sup>th</sup> Order.</p> <p>Interface: GPIB, Ethernet, USB 3.0, USB (Peripheral), LAN, RS232/422/485 Adapter and VGA output</p> <p>Internal Memory: Non-volatile memory of 2 GB.</p> <p>Power Supply: AC 230 V 50 Hz.</p> <p><u>Cables:</u></p> <p>Voltage: input voltage measurement cord red / yellow / blue / gray, min 3m length.</p> <p>Current: Current input, ac/dc high accuracy current probe core min diameter- <math>\varnothing 24</math> mm, 500 amp, with Cord with min length 3m.</p> <p>Note: Possibility of controlling, monitoring and Logging of All above data from Automation system.</p>

Sl. No	Description
3.7.	<p><b><u>Software and Test Reports Requirements:</u></b></p> <p>The motor test bench software shall have a modular design architecture. Provision shall be available for SITARC EVF to customize the test process as and when required.</p> <p>The system must have the function of automatic zero-point calibration while at start. The system should be Hardware-in-the-loop (HIL) based testing techniques.</p> <p><u>The software should have the following functions but not limited to:</u></p> <ul style="list-style-type: none"> <li>The standard communication interface with host computer software.</li> <li>Communication control interface with Power Source.</li> <li>Road Load Simulation (RLS).</li> <li>Drive train cycle simulation (IDC, WMTC)</li> <li>Shall be able to write user defined test programs in a format like excel and any other format.</li> <li>Standard test cycles like peak power test, 30 minutes power test shall be incorporated.</li> <li>Should be able to execute Transient test profiles in speed / torque representing vehicle cycles</li> <li>Continuous recording of test data by means of recording shall be supported.</li> <li>Realtime controller with DUT on CAN and Dyno controller shall be work.</li> <li>Shall have safety functions like limit monitoring for user defined channels.</li> <li>Shall be able to plot all 4 Voltage, 4 Current, (1 each DC and 3 each AC), encoder, PWM, Speed, Power, Power factor, in 1 time scale for comparison purpose. (Stacked plot)</li> <li>Should be able to interface application systems on CAN Bus system.</li> <li>All the equipment's should be controlled from the Automation system.</li> <li>User interface should be able to write and execute formulas.</li> <li>Data logging facility shall be incorporated in case of errors in test equipment's and DUT while the system is under test sequence.</li> <li>If any abnormal situation arises the whole system should shut down safely.</li> <li>Standard USB / LAN / APG Interfaces or Serial Communications, USB interface, HDMI interface, RS232/422/485 Adapter and GPIB interface.</li> <li>Provision of all corresponding cables and connectors.</li> </ul>

Sl. No	Description
3.8.	<p><b><u>Hard Ware Requirements:</u></b></p> <p>Industrial PC along with Standard USB / LAN / APG Interfaces or Serial Communications, USB interface, HDMI interface, and GPIB interface of HDD with min 1 TB space and SSD with min 500GB space.</p> <p>Screen Resolution (max.): Full-HD (1920 x 1080).</p>
3.9.	<p><b><u>Data Acquisition System:</u></b></p> <p>Torque measurement accuracy: <math>\pm 0.05\%</math></p> <p>Torque control accuracy: <math>\pm 0.01\%</math></p> <p>Speed Measurement accuracy: <math>\pm 1</math> RPM</p> <p>Speed control accuracy: <math>\pm 0.01\%</math></p> <p>Test motor current AC/DC measurement 6 channels</p> <p>Test motor voltage measurement channels 6 channels</p> <p>Power analyser measurement accuracy: <math>\pm 0.05\%</math></p> <p>Sampling rate of the data acquisition system: <math>\geq 100</math> kHz</p> <p>Temperature measurement range: <math>-40^{\circ}\text{C}</math> to <math>150^{\circ}\text{C}</math></p> <p>Temperature measuring accuracy: <math>\pm 1^{\circ}\text{C}</math></p> <p>Temperature resolutions: <math>0.1^{\circ}\text{C}</math></p> <p>Temperature sensor interface with 8 channels (facility to interface temperature sensors of all types shall be available)</p> <p>Vibration sensor measuring range (RSM): 0 – 20 mm/s.</p> <p>Dynamometer maximum vibration speed value (RSM): <math>\leq 2\text{mm/s}</math> (independent), <math>\leq 3.5\text{mm/s}</math> (loading).</p> <p>Note: Possibility of controlling, monitoring and Logging of All above data from Automation system.</p>
3.10.	<p><b><u>Safety Protection Measure:</u></b></p> <p>Real-time temperature monitoring of the dynamometer bearings.</p> <p>Real-time monitoring of current, voltage, speed, torque, and real-time vibration monitoring of Dyno.</p> <p>Safety shield protection for rotating members such as couplings, torque transducers etc.,</p> <p>The electronic control system shall have the protection functions such as short circuit, leakage, power failure, overcurrent, and overvoltage.</p>

Sl. No	Description
	<p>The system software must have the safety detection function. (i.e., Alarm when the monitoring value exceeds the threshold value).</p> <p><u>Note:</u> For the endurance / durability test, the system shall automatically predict the trend, based on the historical data monitored such as vibration and other parameters. When such prediction fails, the system shall give prompt to pay attention.</p>
3.11.	<p><b><u>Automated Continuous Raw Data Recording System for Load Cycle Testing</u></b></p> <p>The proposed system must fulfil the following technical and functional requirements to ensure seamless operation, accurate data acquisition, and reduced resource dependency during load cycle testing:</p> <p><u>Continuous Data Acquisition and Recording</u></p> <p>The system must automatically and continuously record all relevant test data throughout the load cycle, without interruptions. Data must include, but not be limited to:</p> <ul style="list-style-type: none"> <li>• Torque, speed, and power output of the motor.</li> <li>• Electrical parameters such as voltage, current, and frequency.</li> <li>• Environmental conditions such as temperature and humidity, if applicable.</li> </ul> <p>The recorded data should be timestamped and stored in a universally accessible format (e.g., CSV or database).</p> <p><u>Noise Level Recording Against Time:</u></p> <p>The system must include sensors and software to measure and record noise levels (in decibels) continuously during the test.</p> <p>Noise data should be recorded with a time stamp and correlated with operational parameters to identify trends and anomalies.</p> <p>The system should provide filtering options to isolate specific frequency ranges, if required.</p> <p><u>Real-Time Monitoring and Alerts</u></p> <p>The system must offer real-time monitoring of test data, video feed, and noise levels via an integrated user interface.</p> <p>Customizable alerts should notify operators of threshold breaches or anomalies during the test cycle.</p>

Sl. No	Description
	<p><u>Resource Optimization and Test Efficiency</u></p> <p>The system must reduce manual intervention by automating raw data collection and logging processes.</p> <p>Efficient storage mechanisms should allow for long-duration testing without interruptions due to memory limitations.</p> <p>The setup and configuration of the system must be user-friendly to minimize setup time and training requirements.</p> <p><u>Reporting and Data Export Features</u></p> <p>Post-test, the system should generate comprehensive reports that combine data trends, video snapshots, noise level analysis, and input parameters.</p> <p>Export functionality must support formats like PDF, CSV, and proprietary formats as needed.</p> <p>This requirement ensures that the testing setup is equipped with state-of-the-art tools to support precise, reliable, and efficient load cycle testing while minimizing resource dependency.</p>
4.	<p><u>List of deliverables along with the system</u></p> <p>All electrical cables shall be routed through insulated protective covers.</p> <p>Safety features must be provided to prevent overruns, collisions, and excessive load/torque conditions.</p> <p>An Emergency Power OFF (EPO) button shall be provided at the operator station.</p> <p>All necessary cables, accessories, and peripherals required to control the equipment through the control and processing unit shall be supplied.</p> <p>Required system, furniture, and other related accessories shall be included.</p>
5.	<p><u>Calibration of Dyno:</u></p> <p>A Suitable reference motor or weights shall be provided for Dyno Calibration.</p> <p>The calibration certificates or reports shall be issued by an ISO/IEC 17025:2017 accredited calibration laboratory and the documents shall have all the details pertaining to calibration of all the measuring instruments / equipment which shall comply with the international requirements.</p>
6.	<p><u>General:</u> The supplier shall ensure the following:</p> <p>Selection and justification of instrument ranges and accuracy limitations for rating of the motor under test shall be provided.</p>

Sl. No	Description
	<p>Shall provide evidences like technical writes up, test templates, performance calculations, pictures, videos, IEC / IS standards reference clause / sections to justify the supplier technical offer against specification for the supplied item.</p> <p>Current valid calibration certificate/report through accredited calibration lab as per ISO/IEC 17025: 2017 standard for all measuring instruments shall be provided at the time of commissioning.</p>

**Note:** The bidder shall ensure that all detailed technical specifications, torque-speed-power graphs to demonstrate the capabilities of both loading systems, catalogues, brochures, drawings, etc., shall be furnished by the bidder for each instrument, equipment, and item.

## Section4: Commercial Bid – Standard Forms

Commercial Tender Standard Forms Shall be used for the preparation of the Commercial Tender according to the instructions provided in Section 2.

FORM	DESCRIPTION
FIN-1	Price Bid Submission Form.
FIN-2	Price Schedule Breakup
FIN-3	Summary of Price Schedule.
FIN-4	Historical Financial Performance
FIN-5	Proforma For Bank Guarantee for Earnest Money Deposit
FIN-6	Proforma For Bank Guarantee for Performance Security
FIN-7	A power of attorney for the authorized representative of each consortium member of the bidder.



**FORM FIN-1**  
**Price Bid Submission Form**

---

Date:

To:

The Director,  
SITARC EV Foundation (SITARC EVF),  
369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore – 641  
021.  
E-mail: [sitarcevf@sitarc.com](mailto:sitarcevf@sitarc.com), [sitarcevclus@gmail.com](mailto:sitarcevclus@gmail.com);

TENDER No. SEVF/TEQ/DYN/2025-26/001

Dear Sir,

Having examined the Instructions to Tenderers, Specifications, Drawings, Schedule of Rates and Prices and Addenda Nos.\_\_\_\_\_ For the supply, installation and commissioning of equipment/item as per tender, we the undersigned, offer to complete such order and remedy any defects therein in conformity with the Tender Specifications, Drawings, Schedule of Rates and Prices and Addenda for the sums of money as indicated below in words.

Indian Rupees (figures & words

---

We understand that SITARC EVF is at liberty to decide on prices detailed out in the Schedule of Rates and Prices.

We acknowledge that the Preamble to Schedule of Rates and Prices, and Schedule of Rates and Prices form part of our Tender.

We agree to abide by this Tender for the period of 6 Months from the date fixed for the Tender submission deadline in accordance with the Tender Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

If our Tender is accepted, we commit to obtain a Performance Deposit in accordance with the Tender Documents.

SITARC EV FOUNDATION

We understand that this Tender, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us.

We understand that you are not bound to accept the highest ranked Tender or any other Tender that you may receive.

We agree to SITARC EVF's right to award the Tender in full.

Dated this \_\_\_\_\_ day of \_\_\_\_ 2025 Signature \_\_\_\_\_ in the capacity of  
\_\_\_\_\_

Duly authorized to sign the Tender for and on behalf of  
\_\_\_\_\_  
(in BLOCK Letters)

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

Company Seal: \_\_\_\_\_

**Witness 1**

Name :

Address:

Occupation:

**Witness 2**

Name:

Address:

Occupation:

**FORM FIN-2**  
**Price Schedule Breakup**

TENDER No. SEVF/TEQ/DYN/2025-26/001

**Item:** Supply Installation and Commissioning of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer. – 1 Set

The bidder shall be provided the separate price details as per the below categories

**A. Loading System & Power Source: -**

"The bidder shall be provided with the price details for the test beds, as outlined in the technical specification Annexure-IV of the TD."

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Loading System-1 (As per the specification given in Annexure IV)	1 No				
2.	Loading System-2 (As per the specification given in Annexure IV)	1 No				
3.	Environmental Chamber	1 No				
4.	Programmable, Bi-Directional DC Power Source cum Battery Emulator – 18 kW	1 No				
5.	Programmable, Bi-Directional DC Power Source cum Battery Emulator – 45 kW	1 No				

**B. Measuring Instruments & Equipment's: -****i. Power Analyser with Current Sensors: -**

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Power Analyser for Loading System-1	1 No				
2.	Power Analyser for Loading System-2	1 No				

**ii. Current Sensors: -**

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Current Sensor for Loading System-1	1 No				
2.	Current Sensor for Loading System -2	1 No				

**iii. Torque Transducers: -**

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	0-10 Nm					
2.	0-50 Nm					
3.	0-100 Nm					
4.	0-500 Nm					

iv. Test Automation Control Panels

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Test Automation Control Panel for Loading System-1	1 No				
2.	Test Automation Control Panel for Loading System-2	1 No				

C. Software & Data Acquisitions: -

The bidder shall provide the price as per the details mentioned below, if any items which are not mentioned below the bidder shall be submit price details also.

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Software & Data Acquisition System for Loading System-1					
2.	Software & Data Acquisition System for Loading System-2					
3.	CAN I/O Modules					
4.	Test bed Safety System					
5.						
6.						
7.						
8.						
9.						
10.						

**D. Other Equipment & Accessories: -**

The bidder shall provide the price as per the details mentioned below, if any items which are not mentioned below the bidder shall be submit price details also.

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Milli Ohm Meter					
2.	Vibration Sensor & Cables					
3.	Noise Sensor					
4.	Temperature Sensor					
5.	Drive Panel, Inverters / Regenerative units					
6.	Mounting Brackets for E-Motors (Hub & Mid Drive)					
7.	Mounting Brackets for foot and face motor					
8.	Locked Rotor Arrangements					
9.	Coupling Sets					
10.	Laser shaft alignment tool					
11.	Standard accessories					
12.	Pre-installation tool kit					
13.						
14.						
15.						
16.						
17.						
18.						
19.						

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
20.						

### E. External Service & Support

The bidder shall provide the Price as per the details mentioned below

Sl. No	Descriptions	Criteria	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	<u>AMC Details:</u> Rate per year for the next 2 years. (after the expiry of 1 <sup>st</sup> year free AMC as per the TD ITB Cl.No.35)	2 <sup>nd</sup> Year				
		3 <sup>rd</sup> Year				
2.	<u>Calibration Details:</u> Rate per year for the next 2 years. (after the expiry of 1 <sup>st</sup> year free calibration as per the TD ITB Cl.No.36)	2 <sup>nd</sup> Year				
		3 <sup>rd</sup> Year				

Name of the Authorized Signatory: \_\_\_\_\_ in the capacity of [*Designation*] \_\_\_\_\_

Signed: \_\_\_\_\_

Duly authorized to sign the Tender for and on behalf of: \_\_\_\_\_

Date: \_\_\_\_\_

Company Seal: \_\_\_\_\_

**FORM FIN-3**  
**Summary of Price Schedule**

TENDER No. SEVF/TEQ/DYN/2025-26/001

**Item:** Supply Installation and Commissioning of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer. – 1 Set. The bidder shall provide summary of price details as mentioned below.

Sl. No	Descriptions	Item Qty	Basic Rate (INR)	GST %	GST Amount (INR)	Net Rate (INR)
1.	Supply Installation and Commissioning of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer as per the Annexure IV (which includes all the associated components and accessories)	1 Set				
2.	<u>AMC Details:</u> Rate per year for the next 2 years. (after the expiry of 1 <sup>st</sup> year free AMC as per the TD ITB Cl.No.35)	2 <sup>nd</sup> Year				
		3 <sup>rd</sup> Year				
3.	<u>Calibration Details:</u> Rate per year for the next 2 years. (after the expiry of 1 <sup>st</sup> year free calibration as per the TD ITB Cl.No.36)	2 <sup>nd</sup> Year				
		3 <sup>rd</sup> Year				

Name of the Authorized Signatory: \_\_\_\_\_ in the capacity of [*Designation*] \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Company Seal: \_\_\_\_\_



**FORM FIN-4**  
**Historical Financial Performance**

---

**A. Information from Financial Statements**

	<b>FY 22-23</b>	<b>FY 23-24</b>	<b>FY 24-25</b>
Total Assets (TA)			
Total Liabilities (TL)			
Net Worth = TA - TL			
Current Assets (CA)			
Current Liabilities (CL)			
Working Capital = CA - CL			

**B. Information from Income Statements**

	<b>FY 22-23</b>	<b>FY 23-24</b>	<b>FY 24-25</b>
Total Revenues			
Profits Before Taxes			
Profits After Taxes			

## FORM FIN-5

### Proforma for Bank Guarantee for Earnest Money Deposit

---

#### PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

(TO BE OBTAINED FROM A NATIONALISED BANK IN INDIA)

Ref: \_\_\_\_\_ Date: \_\_\_\_\_ Bank Guarantee No: \_\_\_\_\_

In accordance with invitation to Tender Notice No. SEVF/TEQ/DYN/2025-26/001 for procurement of equipment/item and accessories for SITARC EV Foundation, 369/188,189 Pollachi Main Road Kurichi SIDCO Industrial Estate PO, Coimbatore-641021. (herein after referred to as SITARC EVF), M/s -

\_\_\_\_\_  
BIDDER'S Name & Address (herein after referred to as BIDDER) wish/wishes to participate in the said tender and a Bank Guarantee for the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) valid up to 6 Months from the date of submission of tender document is required to be submitted by the Bidder toward the Earnest Money Deposit for -----(Item Name)

a) We the (Banker's Name \_\_\_\_\_) (Indicate the Name of the Bank) (Hereinafter referred to as 'the Bank') at the request of the BIDDER do hereby unequivocally and unconditionally guarantee and undertake to pay during the above said period, on written request by SITARC EVF, an amount not exceeding Rs. \_\_\_\_\_ to the SITARC EVF, without any reservation. The guarantee would remain valid up to 6 Months from the date of submission of tender document and if any further extension to this is required, the same will be extended on receiving instruction from the BIDDER on whose behalf this guarantee has been issued.

b) We the bank do hereby further undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the SITARC EVF, stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the SITARC EVF, by reason of any breach by the said BIDDER of any of the terms or conditions or failure to perform the said bid. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_ (in words).

c) We, the bank undertakes to pay to SITARC EVF, any money so demanded not withstanding any dispute or disputes so raised by the supplier(s) in any suit or

proceeding instituted/pending before any court or Tribunal relating thereto, our liability under this agreement being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the supplier(s) shall have no claim against us for making such payment.

d) We the bank or our local branch at Coimbatore further agree that the guarantee herein contain shall remain in full force and effect during the aforesaid period i.e. 6 Months from the date of submission of tender document and it shall continue to be so enforceable till all the dues of the SITARC EVF, under by virtue of the said Bid have been fully paid and its claims satisfied or discharged or till SITARC EVF, certifies that the terms and conditions of the said bid have been fully and properly carried out by the said BIDDER and accordingly discharges in guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the 6 Months from the date of submission of tender document, we shall be discharged from all liability under this guarantee thereafter.

e) We, the bank or our local branch at Coimbatore further agree that the SITARC EVF, shall have the fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said bid or to extend time of performance by the said BIDDER from time to time or to postpone for any time or from time to time any of the powers exercisable by the SITARC EVF, against the said BIDDER and to forbear or enforce any of the terms and conditions relating to the said bid and we shall not be relieved from our liability by reason of any such variation, postponement or extension being granted to the said BIDDER or for any forbearance act or omission on the part of the SITARC EVF or any indulgence by the SITARC EVF, to the said BIDDER or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision, have effect of so relieving us.

f) This guarantee will not be discharged due to the change in the name, style and constitution of the Bank or the BIDDER.

g) We, the bank or our local branch at Coimbatore lastly undertake not revoke this guarantee during its currency except with the previous consent of the SITARC EVF, in writing.

h) We, the bank further agree that this guarantee shall also be inviolable at our place of business at \_\_\_\_\_ in the state of \_\_\_\_\_ dated \_\_\_\_\_ day of 2025.

i) Notwithstanding anything contained herein above.

## SITARC EV FOUNDATION

- (i) Our liability under this Bank guarantee shall not exceed Rs. \_\_\_\_\_/-  
(Rupees\_\_\_\_\_ only)
- (ii) This Bank guarantee shall be valid up to 6 Months from the date of submission of tender document
- (iii) We are liable to pay the guaranteed amount or any part thereof under this Bank guarantee only and only if you serve upon us a written claim on or before 210 Days from the date of submission of tender document and
- (iv) Witness (signature, name & address) for \_\_\_\_\_ (Indicate the name of bank)

1. Power of Attorney No. \_\_\_\_\_

2. Date: \_\_\_\_\_

SEAL OF BANK

**FORM FIN-6**  
**Proforma for Bank Guarantee for Performance Security**

---

**PROFORMA FOR BANK GUARANTEE FOR PERFORMANCE SECURITY**

To: \_\_\_\_\_ (Name of Purchaser)

WHEREAS ..... (Name of Supplier) hereinafter called "the supplier" has undertaken, in pursuance of Tender No ..... Dated ..... and purchase order No ..... Dated ..... 2025 to Supply.....  
(Description of Goods and Services) hereinafter called "the order".

AND WHEREAS it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the order.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE we hereby affirm that we are Guarantors and responsible to you, on behalf of the supplier, up to a total of ..... (Amount of Guarantee in words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the order and without cavil or argument, any sum or sums within the limit of ..... (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the ..... day of .....2025 (Ref purchase order)

Signature and Seal of Guarantors

.....  
.....  
.....

Date .....2025.....

Address .....

.....  
.....

**FORM FIN-7**  
**POWER OF ATTORNEY**

---

**A power of attorney for the authorized representative of each consortium member of  
the bidder**

**(To be signed by each Firm that is a part of a consortium)**

Know all men by these presents, \_\_\_\_\_ (Name of Company with registration number) do hereby irrevocably constitute, nominate, appoint and authorize \_\_\_\_\_ (Name of the person) and presently residing at \_\_\_\_\_ (Complete Address) who is presently employed with us and holding the position of \_\_\_\_\_ (Title/Designation), as our true and lawful attorney \_\_\_\_\_ (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our Proposals[s] for providing \_\_\_\_\_ (Title of the project) including but not limited to signing and submission of all applications, Proposals and other documents and writings, participate in Pre-Applications and other conferences and providing information/responses to SITARC EVF, representing us in all matters before SITARC EVF, including negotiations, signing and execution of all Agreements and undertakings consequent to acceptance of our Proposal, and generally dealing with to SITARC EVF, in all matters in connection with or relating to or arising out of our Proposal for the said tender and/ or upon award thereof to us and/or till the entering into Agreements with to SITARC EVF.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully 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 powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHERE OF WE, \_\_\_\_\_ (NAME OF THE COMPANY) THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DD/MM/YYYY

This Power of Attorney shall be effective, binding, and operative till DD/MM/YYYY (for 1 year) if not revoked earlier or as long as the said Attorney is in the service of the Company, whichever is earlier

SITARC EV FOUNDATION

I accept,

Name:

Title:

Date:

Place:

Witness:

## Section 5: Check List to the Bidders

### i. Envelope A – Techno commercial Bid

Sl. No	Form	Descriptions	Page No
1.	-	The Original Tender Document has published full copy shall be duly signed in all the pages with office seal.	
2.	-	Tender Document Charges (Cash or DD in favour of SITARC EVF)	
3.	-	Authorisation letter for participating at the time of opening the bids.	
4.	PRE-QUAL-1	Compliance sheet to Prequalification Criteria	
5.	TECH-1	Techno commercial Bid Submission Form.	
6.	TECH-2	Tenderer Information Sheet	
7.	TECH-3	Bidder's Relevant Experience	
8.	TECH-4	Compliance sheet to Technical Specification	
9.	TECH-5	Guarantee / Warranty of Affirmation	
10.	TECH-6	Declaration of Undertaking	
11.	TECH-7	Bill of Material without Cost	
12.	TECH-8	Declaration for Annual Maintenance Contract	
13.	TECH-9	Declaration for Calibration	
14.	TECH-10	Declaration for Software / Firmware Upgradation	
15.	Annexure I	Declaration (General)	
16.	Annexure II	Additional Specification / Features	
17.	Annexure III	List of Items to be Procured under this tender	
18.	Annexure IV	Technical Specification / Requirements of Fully Automated Electric Vehicle Motor Test System Using Regenerative Type Dynamometer along with supporting documents of associated components and accessories.	
19.	FIN-3	Historical Financial Performance	
20.	FIN-4	Proforma For Bank Guarantee for Earnest Money Deposit.	
21.	FIN-6	A power of attorney for the authorized representative of each consortium member of the bidder.	



Sl. No	Form	Descriptions	Page No
22.	-	Memorandum of Understanding / Articles of Association / Partnership Deed.	
23.	-	EMD (DD / Bankers Cheque) Exemption for NSIC (applicable to all MSE units) and UDYAM Registration / UAM	
24.	-	Detailed techno commercial specification, catalogue, brochure, drawing, etc.	
25.	-	Pre-Installation Requirements of the Quoted System/ Item	
26.	-	Calibration Reports of the Quoted System / Item	
27.	-	GST Registration Certificate, PAN Card	
28.	-	Authorisation letter for participation	
29.	-	Certificate of Authorized Distributorship/ Dealership/ Retailer ship from the Bidder/ Manufacturer	
30.	-	<b>Eligibility – Original Manufacturer</b>	
31.	-	Experience	
32.	-	Performance statement showing major supplies effected during the past 3 years	
33.	-	Turnover with audited Balance Sheet (last 3 years)	
34.	-	Manufacturer's License (Duly attested)	
35.	-	<b>Eligibility – non-manufacturer</b>	
36.	-	Experience	
37.	-	Authorization/ Distribution rights from manufacturer	
38.	-	Performance statement showing major supplies effected during the past 3 years	
39.	-	Turnover with audited Balance Sheet (last 3 years)	
40.	-	In case of dealers/ distributors turnover over and experience	
41.	-	Principal's invoice along with their quotation & also current and valid Authorization/ Dealership Certificate of the Foreign Manufacturer/ Principal	
42.	-	Submission of certificate of registration of firm authorization letter from the manufacturer/ bidder to quite the submit letter	

Sl. No	Form	Descriptions	Page No
43.	-	Photocopy of Warrantee Agreement between the Bidder and the Service Provider, if applicable.	
44.	-	List of users with contact Address, Phone and Email ID	
45.	-	Profile of bidder's organization	
46.	-	Descriptive leaflet / brochure of the equipment/item quoted are to be enclosed along with the techno commercial details.	
47.	-	Ensure that User certificates from at least two users, on their letter head stating that the performance of similar make and model supplied to them is satisfactory is enclosed.	
48.	-	Any other details pertaining to techno commercial bid.	

**ii. Envelope B – Commercial Bid**

Sl. No	Form	Descriptions	Page No
1.	FIN-1	Price Bid Submission Form.	
2.	FIN-2	Price Schedule Breakup	
3.	FIN-3	Summary of Price Schedule.	
4.	FIN-7	A power of attorney for the authorized representative of each consortium member of the bidder.	

**Note:**

**Ensure the following;**

- ❖ Signature in all pages.
- ❖ Provide page numbers to all the documents attached in ascending order.

**# All the envelopes A and B (Properly Sealed and Signed) are to be kept inside in an outer envelope of bigger size with properly sealed and signed.**

**# The following information are to be furnished in each of all the Four Covers.**

- ❖ Tender Ref No with last date of submission.
- ❖ Item with name
- ❖ Bidders complete postal address with contact person name and phone number.
- ❖ Purchaser complete postal address

**# All the envelopes are to be clearly marked as**

“Envelope A”- Techno commercial Bid, “Envelope B”- Price Bid, it is to be ensured that all the documents are kept inside the relevant envelopes.

-----End of the Document-----