



**NATIONAL BANK FOR AGRICULTURE AND RURAL
DEVELOPMENT**

राष्ट्रीय कृषि और ग्रामीण विकास बैंक

**Department of Premises, Security and Procurement
NABARD, Gujarat Regional Office,
2nd Floor, NABARD Tower,
Opposite Municipal Garden,
Usmanpura, Ahmedabad – 380013
Telephone – 079-27554024 / 079-27554041
Email – dpasp.ahmedabad@nabard.org**

**Tender for Installation Testing and Commissioning of Solar
Roof Top System at (i) NABARD Tower, Opposite Municipal
Gaden, Usmanpura - 40 KW, and at (ii) NABARD Vihar, SV
Desai marg, New Commercial Staff Society, Navrangpura,
Ahmedabad – 30 KW**

**Part-I
(Technical Bid)**

NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT
GUJARAT REGIONAL OFFICE, AHMEDABAD

Index

S. No.	DESCRIPTION	PAGE NO.
	Part-I (Technical Bid)	
1	Notice Inviting Tender	3
2	Schedule Of Events	8
3	Form of Tender	9
4	Pre-Qualification Criteria	11
5	Checklist for Technical Evaluation	14
	Previous Experience	16
6	Details of Key Administrative and Technical Personnel	17
7	Details of Bank Account	18
8	General Instructions	19
9	General Terms & Conditions (Annexure-A)	23
10	Special Conditions (Annexure-B)	27
11	Scope of Work (Annexure-C)	33
12	Safety Precautions (Annexure-D)	43
13	Technical Inspection Report for Solar PV Rooftop Project	44
14	Declaration (Annexure-E)	56
15	Pre-Contract Integrity Pact (Annexure-F)	57
16	Articles of Agreement	62
17	Part-II (Financial Bid)	
	Schedule of Quantity (Annexure-H)	65



निविदा आमंत्रण सूचना
Notice Inviting Tender

संदर्भ सं NB.Guj./ 48796/DPSP/2025-26

Date: 27 June 2025

कार्य का नाम: (i) नाबार्ड टॉवर, म्युनिसिपल गार्डन के सामने, उस्मानपुरा, अहमदाबाद में 40 KW और (ii) नाबार्ड विहार, एसवी देसाई मार्ग, न्यू कॉमर्शियर स्टाफ सोसाइटी, नवरंगपुरा, अहमदाबाद में 30 KW क्षमता के सोलर रूफ टॉप सिस्टम की स्थापना, परीक्षण और उन्हें आरंभ करना

1. राष्ट्रीय कृषि और ग्रामीण विकास बैंक (नाबार्ड) उपर्युक्त कार्य अर्थात् (i) नाबार्ड टॉवर, म्युनिसिपल गार्डन के सामने, उस्मानपुरा, अहमदाबाद में 40 KW और (ii) नाबार्ड विहार, एसवी देसाई मार्ग, न्यू कॉमर्शियर स्टाफ सोसाइटी, नवरंगपुरा, अहमदाबाद में 30 KW क्षमता के सोलर रूफ टॉप सिस्टम की स्थापना, परीक्षण और उन्हें आरंभ करने के लिए अनुमानित ₹26.25 लाख के कार्य के लिए निविदा आमंत्रित करता है। यह लागत का एक मोटा अनुमान है।

2. आपसे अनुरोध है कि उपर्युक्त करार के लिए इस निविदा दस्तावेज़ में दिए गए विवरण और उल्लिखित अन्य आवश्यकताओं के अनुसार सरकार के ई-मार्केटप्लेस (GeM) के माध्यम से दो बोली प्रणाली में अपना प्रस्ताव प्रस्तुत करें। निविदा दस्तावेज़ <https://www.nabard.org> और GeM पोर्टल से डाउनलोड किया जा सकता है।

3. बोली पूर्व बैठक **नाबार्ड क्षेत्रीय कार्यालय, उस्मानपुरा, अहमदाबाद 380013** में 4 जुलाई 2025 को सायं 03.00 बजे आयोजित होगी। बोली-पूर्व बैठक में भाग लेने से पहले बोलीकर्ता साइट का सर्वेक्षण करके कार्य/ सेवा की व्यवहार्यता के बारे में पर्याप्त जानकारी प्राप्त करके आश्वस्त हो जाएँ। बोली-पूर्व बैठक में आप जो भी स्पष्टीकरण चाहते हैं, वह बैठक तिथि से कम से कम एक कार्यदिवस पहले लिखित में

Name of Work: Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, Opposite Municipal Garden 380013, and at (ii) NABARD Vihar, SV Desai Marg, New Commercial Staff Society Navrangpura, Ahmedabad - 30 KW.

1. National Bank for Agriculture and Rural Development (NABARD) invites tender for the captioned work i.e. **Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW at an estimated cost of Rs.26.25 lakhs.** The estimate is given merely as a rough guide.

2. You are requested to submit your offer through Government - e - Marketplace (GeM) in Two Bid System for the aforesaid contract as per the detailed specifications and other requirements as mentioned in this tender document. The tender document will be available for download at <https://www.nabard.org> and in GeM Portal.

3. The Pre-Bid meeting will be held at 1500 Hrs on 4th July 2025 at **NABARD Regional Office, Usmanpura, Ahmedabad 380013**. To be eligible to participate in the pre-bid meeting, the bidder should have already conducted a site survey and should have satisfied himself about the overall feasibility of the work/service. Any clarifications being sought in the pre-bid meeting should be submitted in writing at least 01 working day



<p>अपने प्रश्न हमें dpsp.ahmedabad@nabard.org पर भेजें। बोली-पूर्व बैठक के सभी स्पष्टीकरण इस निविदा का हिस्सा माने जाएंगे।</p> <p>4. जेम (GeM) पोर्टल के माध्यम से प्राप्त निविदाएँ ही स्वीकार की जाएँगी। देरी से प्राप्त और फैक्स/ईमेल / डाक से प्राप्त निविदाएँ स्वीकार्य नहीं हैं और उन्हें निरस्त कर दिया जाएगा। जिन बोलीकर्ताओं की निविदाएँ निर्धारित स्वरूप में नहीं हैं, वे निरस्त कर दी जाएँगी।</p> <p>5. निविदा की तकनीकी बोली (भाग -1) नाबार्ड, गुजरात क्षेत्रीय कार्यालय, अहमदाबाद-380013 में 18 जुलाई 2025 को दोपहर 03.00 बजे या बाद में, जेम के नियमों के अनुसार नाबार्ड की सुविधानुसार खोली जाएँगी। बोली खोलने की प्रक्रिया के दौरान बोलीकर्ता उपस्थित रह सकते हैं।</p> <p>6. जो बोलीकर्ता तकनीकी मूल्यांकन में पात्र पाए जाएँगे, उनकी कीमत बोली (भाग II) एक भिन्न तिथि पर खोली जाएगी जिसकी सूचना जेम पोर्टल से दी जाएगी। यदि इस निविदा दस्तावेज़ के नियमों और जेम के नियमों में कोई विरोधाभास है तो इस दस्तावेज़ को प्राथमिकता दी जाएगी।</p> <p>7. तकनीकी बोली, कीमत बोली, कार्य के दायरे और आवश्यक कार्य/सेवाओं, सफल बोलीकर्ता के चयन आदि के बारे में इस निविदा के नियमों-शर्तों और इस निविदा दस्तावेज़ के अन्य हिस्सों में विस्तार से उल्लेख किया गया है।</p> <p>8. बोलीकर्ता दरें उद्धृत करने से पहले कृपया इस निविदा दस्तावेज़ को ध्यानपूर्वक पढ़ें। निविदाकर्ता परियोजना स्थल अर्थात् नाबार्ड विहार, सेंट जेवियर कॉलेज कॉर्नर रोड, एलिसब्रिज, नवरंगपुरा, अहमदाबाद और नाबार्ड, गुजरात क्षेत्रीय कार्यालय (नाबार्ड टावर), म्युनिसिपल गार्डन के सामने, उस्मानपुरा, अहमदाबाद का दौरा करें और सर्वेक्षण करके वर्तमान स्थितियों और किए जाने वाले कार्य के दायरे से भलीभाँति</p>	<p>prior to the date of pre-bid meeting by email to dpsp.ahmedabad@nabard.org. All the clarifications of the pre-bid meeting will be part of tender.</p> <p>4. Tenders submitted through GeM portal only will be accepted. Tender received late or received through fax/email/post will not be accepted and will be rejected. The tenders of the bidders whose tender is not in accordance with the prescribed manner, will be rejected.</p> <p>5. Technical Bid (Part- I) of Tender will be opened at NABARD Regional Office, Usmanpura, Ahmedabad 380013 on 18 July 2025 at 1500 hrs or later as per convenience of NABARD and as per the rules of GeM. Bidders may be present during the time of opening of bids.</p> <p>6. Price Bid (Part II) of bidders who qualify the technical evaluation will be opened on a separate date through GeM portal. If there is any conflict between the rules of this tender document and the rules of GeM, then this document will be given preference.</p> <p>7. Instructions regarding Technical Bid, Price Bid, scope of work/services required, selection of successful bidder etc have been elaborated in the Terms and Conditions of the tender and other parts of the tender document.</p> <p>8. Bidders are advised to go through the tender documents carefully before quoting the rates. The tenderers are advised to visit the site NABARD Vihar, Near St. Xavier College Corner road, Ellisbridge, Navrangpura, Ahmedabad and NABARD Gujarat Regional Office (NABARD Tower), Opp. Municipal Garden, Usmanpura, Ahmedabad and conduct survey of the existing conditions so as to familiarize</p>
--	---

<p>परिचित हो जाएँ तथा दरें उद्धृत करने से पहले नाबार्ड से सभी आवश्यक स्पष्टीकरण प्राप्त कर लें।</p> <p>9. नीचे दिए गए बैंक खाते में NEFT के माध्यम से ₹52,500/- (रुपये बावन हजार पाँच सौ मात्र) की बयाना राशि जमा करवाई जाए। बगैर ईएमडी प्राप्त होने वाली निविदाएँ निरस्त कर दी जाएँगी। खाताधारक का नाम : NABARD चालू खाता नंबर : NABADMN02 बैंक का नाम : NABARD Head Office, Mumbai आईएफएससी IFSC Code : NBRD0000002</p> <p>10. बोलीकर्ताओं द्वारा जमा कराई गई ईएमडी पर कोई ब्याज देय नहीं होगा। सफल बोलीकर्ता को कार्य दिए जाने के बाद असफल बोलीकर्ताओं की ईएमडी लौटा दी जाएगी। आपसे अनुरोध है कि निविदा दस्तावेज़ के साथ खाते में राशि जमा कराने की रसीद की प्रति भी प्रस्तुत करें। ऐसा नहीं करने पर निविदा स्वीकार नहीं की जाएगी। (ईएमडी राशि जमा कराने के बाद निविदाकर्ता इस ट्रांजेक्शन का विवरण हमें ईमेल से dpsp.ahmedabad@nabard.org पर भेजें।)</p> <p>11. जेम के मानदंडों के अनुसार, बोली खोलने की तिथि से 90 दिन तक यह बोली स्वीकार करने के लिए वैध मानी जाएगी।</p> <p>12. निविदा में उल्लिखित नियमों व शर्तों के प्रति सहमति के रूप में इस ऑफर में शामिल सभी दस्तावेज़ों और निविदा के सभी पृष्ठों पर बोलीकर्ता के हस्ताक्षर हों व सील लगी हो।</p> <p>13. नाबार्ड को यह अधिकार है कि वह बगैर कोई कारण बताए एक या एकाधिक बोलीकर्ताओं की कोई भी या सभी निविदाएँ आंशिक या पूर्ण रूप से निरस्त करे।</p>	<p>themselves with the nature and scope of works to be carried out and get all clarifications as necessary from NABARD before quoting their rates.</p> <p>9. An Earnest Money Deposit of Rs.52,500/- (Rupees Fifty Two Thousand Five Hundred only) should be remitted by NEFT into the account mentioned below. Tender without EMD shall be rejected. Payee Name : NABARD Current Account No: NABADMN02 Name of the Bank: NABARD Head Office, Mumbai IFSC Code: NBRD0000002</p> <p>10. No interest shall be paid on the EMD submitted by the bidders. EMD of unsuccessful bidders would be refunded after the award of work to the successful bidders. We request you to give us a copy of the acknowledgement crediting our Account along with tender document failing which the tender will not be considered for acceptance. (After depositing the EMD amount, the tenderer is advised to send an email to dpsp.ahmedabad@nabard.org with the details of the transaction)</p> <p>11. The bid shall remain valid and open for acceptance for 90 days from the date of opening of the bid and as per norms of GeM.</p> <p>12. All documents that comprise the offer and all pages of tender, should be signed and sealed by the bidder, as a token of acceptance to the terms and conditions specified in tender.</p> <p>13. NABARD reserves the right to accept or reject any/all tender(s) in part or whole of any bidder/bidders without assigning any reasons for doing so.</p>
---	--

14. सफल बोलीकर्ता इस ऑफर को स्वीकार करने की तिथि से 07 दिन के भीतर संलग्न मानक प्रारूप में नाबार्ड के साथ एक करार निष्पादित करेगा। ऐसा नहीं करने पर बोलीकर्ता की ईएमडी जब्त कर ली जाएगी।

15. जो बोलीकर्ता बैंक के साथ संलग्न मानक प्रारूप में प्री कॉन्ट्रैक्ट इंटीग्रिटी पैक्ट निष्पादित करने के इच्छुक हैं, वे ही बोली प्रक्रिया में सहभागिता के लिए पात्र होंगे। गुजरात के लिए नामित स्वतंत्र बाहरी मॉनिटर श्री जगदीप कुमार घई, पीटीए एंड एफई (सेवानिवृत्त) हैं, जिनका पता प्लैट नं. 1032, ए विंग, वनश्री सोसाइटी, सेक्टर 58 ए एंड बी, पाम बीच रोड, नेरूल, नवी मुंबई-400706 है और ईमेल- jkghai@gmail.com तथा मोबाइल 6869422244 है।

16. निविदा दस्तावेज़ में यदि कोई भी विसंगतियाँ, चूक, अस्पष्टता पाई जाती है, अथवा उसके अर्थ के बारे में संदेह उत्पन्न होता है, तो कृपया 'मुख्य महाप्रबंधक, राष्ट्रीय कृषि और ग्रामीण विकास बैंक, म्युनिसिपल गार्डन के सामने, उस्मानपुरा, अहमदाबाद' को लिखित रूप से अवगत करें जो उसकी और मांगी गई जानकारी की समीक्षा करेंगे और यदि निविदा दस्तावेज़ में उसे स्पष्ट रूप से उल्लेखित या विनिर्दिष्ट नहीं किया गया है तो, नाबार्ड द्वारा सभी निविदाकर्ताओं को स्पष्टीकरण जारी किया जाएगा जो निविदा दस्तावेज़ का हिस्सा होगी। निविदा प्रस्तुत करने के 01 कार्य दिवस पूर्व, निविदा दस्तावेज़ में कोई भी विसंगतियाँ, चूक, अस्पष्टता अथवा उसके अर्थ के बारे में संदेह को यदि नाबार्ड की जानकारी में नहीं लाया जाता है तो, नाबार्ड इसके लिए जिम्मेदार नहीं होगा। सभी स्पष्टीकरण/ अधिसूचनाएँ www.nabard.org पर पोस्ट की जाएँगी।

17. कार्य समनुदेशन के 10 दिनों के भीतर, सफल बोलीकर्ता द्वारा स्वीकृत निविदा मूल्य की 5% राशि (01 वर्ष की संविदा का कुल मूल्य) को जमानत के रूप में नाबार्ड के पास रखनी होगी

14. The successful bidder shall execute an agreement with NABARD in accordance with the standard format enclosed within 07 days from the date of work order, failing which the bidder's EMD may stand forfeited.

15. Only bidders who are willing to execute Pre Contract Integrity Pact with the Bank, in accordance with the standard format enclosed, will be eligible to participate in the tender. The Independent External Monitor (IEM) assigned for Gujarat would be Shri Jagdeep Kumar Ghai, PTA & FE (Retd), Flat No 1032 A Wing, Vanashree Society, Sector 58 A & B, Palm Beach Road, Nerul, Navi Mumbai, 400706, email jkghai@gmail.com, Mob: 9869422244.

16. Any discrepancies, omissions, ambiguities in the Tender Documents, if any, or any doubt as to their meaning should be reported in writing to the "The Chief General Manager, National Bank for Agriculture and Rural Development, Gujarat Regional Office, Opp. Municipal Garden, Usmanpura, Ahmedabad" who will review the same and information sought if not clearly indicated or specified, NABARD will issue clarifications to all the tenderers which will become part of the Contract Document. NABARD will not be responsible if the discrepancies, omissions, ambiguities in the Tender Documents or any doubts as to their meaning are not brought to the notice of NABARD before 01 working days prior to the date of pre bid meeting. All clarifications/ notifications will be posted on www.nabard.org.

17. The successful tenderer will be required to submit @5% of the actual contract value, as Security Deposit within 10 days of award of work, which will be

<p>जिसे प्रतिधारण जमा राशि(आरएमडी) के रूप में माना जाएगा।</p> <p>18. दो वर्ष की चूक देयता अवधि पूरी होने के 90 दिन बाद आरएमडी लौटाई जाएगी और उस पर कोई ब्याज देय नहीं होगा। यदि ठेकेदार द्वारा इस करार की किसी भी शर्तों और निबंधनों का उल्लंघन होता है या वह निर्धारित समयसीमा में कार्य/सेवा पूर्ण करने में विफल होता है तो जमानत राशि जब्त की जाएगी।</p>	<p>reckoned towards the Retention Money Deposit (RMD).</p> <p>18. The RMD will be released after 90 days from the expiry of defect liability period of 2 years and will not bear any interest. The Security Deposit will be liable to be forfeited in case the contractor commits any breach of any terms and conditions of the Tender or fails to complete the work/service as per schedule.</p>
---	---

भवदीय

हस्ता/-

(अशोक कुमार)
उप महाप्रबंधक

SCHEDULE OF EVENTS

Date of issue of Tender	27 June 2025
Earnest Money Deposit (EMD)	The Bidder shall deposit Earnest Money Deposit for an amount of Rs.52,500/- (Rupees Fifty Two Thousand Five Hundred only) which can be remitted by NEFT/RTGS into NABARD's bank account as per details given below.
Account Details of National Bank for payment of Earnest Money Deposit	Payee Name : NABARD Current Account No : NABADMNo2 Name of the Bank: NABARD, Mumbai IFSC Code : NBRD00000002
Pre-Bid meeting	15.00 hrs. on 4 July 2025
Last Date of Submission of Bids	Up to 15.00 hrs. on 18 July 2025
Opening of Bids	16.00 hrs. on 18 July 2025
Contact Details: Address for Communication And submission of bid.	NABARD, Gujarat Regional Office, Department of Premises, Security and Procurement, 2nd Floor, NABARD Towers, Opposite Municipal Garden, Usmanpura, Ahmedabad 380013 079-2755-4041/4024



FORM OF TENDER**(on the letter head of the bidder)****Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW.**

Place: Ahmedabad

Date: _____

The Chief General Manager
National Bank for Agriculture
and Rural Development
Usmanpura
Ahmedabad.

Dear Sir,

1. Having examined the schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the quotation / tender, I/We hereby offer to execute the work specified in memorandum at the rates mentioned in the attached schedule of quantities and in accordance with the specification and instructions in writing and with such materials as are provided for and in all other respects in accordance with such conditions so far as they are applicable.

M E M O R A N D U M

a)	Description of work	Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW.
b)	Earnest money Deposit	Rs.52,500/- (Rupees Fifty Two Thousand Five Hundred only) Payee Name : NABARD Current Account No : NABADMNo2 Name of the Bank : NABARD, Head Office, Mumbai IFSC Code : NBRD00000002

2. Should this quotation/tender be accepted, I/We hereby agree to abide by and fulfil the terms and condition of contract annexed hereto so far as they may be applicable or vide fault thereof to forfeit any pay to NABARD, Ahmedabad the amount mentioned in the said conditions.

3. Our Bankers are

a. Bank Name & Branch _____
Account No. _____
IFS code _____

b. Bank Name & Branch _____
Account No. _____



IFS code _____

4. The Names of the proprietor/partners of our firm are:

a. _____
b. _____

5. Names of the proprietor/partner of the firm authorized to sign:

a. _____
b. _____

6. Names of the person hereby given the power of Attorney to sign the contract:

a. _____
b. _____

7. Our PAN No. is _____. (Copy of PAN to be attached)

8. I / We have examined the Scope of Works, Specifications and Schedule of Quantities and Terms and Conditions relating to the Tender for the said works after having obtained/received the Tender invited by you.

9. I / We have visited the site, examined the site of works specified in the Tender Document and acquired the requisite information relating thereto as affecting the Tender.

10. I / We hereby offer to execute and complete the works in strict accordance with the Tender Document at the rates quoted by me / us in the attached Bill of Quantities in all respects as per the Specifications and Scope of Works described in the Tender Document and the Annexures containing Terms and Conditions.

11. I / We have paid interest-free Earnest Money Deposit (EMD) of **Rs.52,500/- (Rupees Fifty Two Thousand Five Hundred only)** by RTGS/NEFT to NABARD' Current Account No NABADMN02, Bank NABARD, Head Office, Mumbai IFSC Code NBRD0000002 and the sum shall be forfeited in the event of our withdrawal of Tender before expiry of the validity period of offer and / or in the event of our failure to execute the Contract when called upon to do so by accepting our Tender.

12. **I / We agree to pay all Government (Central and State) Taxes such as GST and other taxes prevailing from time to time and the rates quoted by us are inclusive of the same.**

13. The rates quoted by me / us are firm and shall not be subjected to variations on account of fluctuation in the market rates or any other reasons whatsoever.

Yours faithfully

(Seal & Signature of Contractor)

Date:

Place:



**INSTRUCTIONS TO THE TENDERERS FOR FURNISHING INFORMATION AS
A PART OF PRE-TENDER QUALIFICATIONS ELIGIBILITY CRITERIA**

1. The Bidder shall be provided the copy of Valid Electrical Contractor license(E&P) , Electrical Contractor Registration(R&B) (Mandatory Doc.) The Bidder shall be a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment there to. A copy of certificate of incorporation shall be furnished along with the Bid in support of above. Proprietorship, Partnership firms having valid registration of the firm with the concerned Government authorities, shall also be eligible to participate in the Tender subject to their fulfilling all the terms and conditions given in the document.

2. Experience

The Bidder shall have minimum 07 years' experience (as on 31/03/2025) in design, supply, installation and commissioning of Rooftop or Ground Mounted grid connected Solar PV Power Plants project carried out for Public Sector Undertakings (PSUs) /Banks/Govt. Office..

SN	Experience Criteria	Value of Work Completed
1	1 similar work during last 7 years (ending 31.03.2025) with annual contract value (costing individually) not less than >>>>	21.00 Lakhs
	OR	OR
2	2 similar works during last 7 years (ending 31.03.2025) with annual contract value (costing individually) not less than >>>>	13.13 Lakhs
	OR	OR
3	3 similar works during last 7 years (ending 31.03.2025) with annual contract value (costing individually) not less than >>>>	10.50 Lakhs

The numbers of the systems and capacity in kW executed by the bidder himself shall be mentioned with SUPPORTING DOCUMENTS to be attached; however the experience of residential solar roof tops executed by the bidder himself in state, but experience of State and other than Gujarat shall be supported with the Work Order and the certificate of commissioning/ certificate of experience issued by the State Nodal Agency/ Certificate of the Chief Electrical Inspector for energizing /charging of the solar power plant shall be submitted

For Grid tied solar power projects executed by the bidder himself in the state other than Gujarat, the list of projects commissioned along with the Work Order and the certificate of commissioning issued by the State Nodal Agency/Certificate of the Chief Electrical Inspector for energizing /charging of the solar power plant shall be submitted. If required NABARD reserves the right to get authenticated certificate issued by the concern issuing authorities.



3. **Average Annual Turnover**

The bidders should have **average Annual Turn Over of at least Rs.8 lakhs** during the **last three years ending 31 March 2025**. The Net Worth of the Bidder during the FY 2022-23, FY 2023-24 or FY 2024-25 shall be positive. The same should be supported with audited balance sheet / profit & loss statement / registered Chartered Accountant certified statement of accounts and Income Tax Returns of last three years.

4. The bidder should have their own office within the municipality areas of **Ahmedabad or Gandhinagar**.

5. Tender shall be accompanied by a copy of each of the documents like,

- a) Articles of Association/Memorandum of Association/ partnership deed/ any other relevant document showing composition of the firm,
- b) List of eligible work executed during last seven years,
- c) PAN,
- d) GSTN, TAN Registration
- e) Employee State Insurance Act registration,
- f) PF registration,
- g) Particulars of bankers & Bank account details.
- h) Details of work experience shall be supported by work orders and corresponding completion certificates.
- i) The client-wise names of similar work(s), year(s) of execution of work (s) awarded, and actual value of executed work(s), reasons for delay (if any), names and full contact details of the officers/ authorities/ departments under whom the work(s) was/were executed should be furnished in the prescribed format.
- j) Details of works on hand
- k) Latest audited final accounts of the business of the contractor duly certified by a Chartered Accountant/certificate of turnover issued by a Chartered Accountant should be enclosed in proof of their credit worthiness and turnover for the last three years.
- l) Income Tax Returns for last three years (FY 2022-23, FY 2023-24, FY 2024-25)
- m) Copy of Electrical Contractor license(E&P) , Electrical Contractor Registration(R&B) issued by the Competent local Authority / State Government.
- n) Copy of Certificate of Empaneled Agency of GEDA or Climate Change Department
- o) It is mandatory for successful bidder to have valid IEC certificates for Solar panels, Invertor as mentioned in the specifications. However, its validity shall be get extended before its expiry, if it gets expired, within the period of the order that shall be placed by NABARD i.e. The IEC certification need not be submitted with the Tender. (IEC 61215-2nd edition and, IEC 61730-2, IEC 61683/IS 61683 and IEC 60068-2 (1,2,14,30)/Equivalent BIS Std)



- p) The PV modules must be tested and approved by one of the IEC authorized test centers.
 - q) Test certificates for the BoS items/ components can be from any of the NABL/ BIS Accredited Testing-Calibration Laboratories/ MNRE approved test centers.
6. If required, original certificates shall be produced for verification by the bidder and will be returned after verification.
7. NABARD reserves the right to verify any or all the documents furnished by the Bidders with any authorities. NABARD also reserves the right to cancel any or all the applications without assigning any reason thereof.
8. Intending applicants are required to furnish details about their firm/organization, experience, competence, etc.
9. The application form should be signed by a person on behalf of the Firm/Organization, who is duly authorized to do so.
10. If the space in the application form is insufficient for furnishing full details, such information may be supplemented on a separate sheet of paper duly signed.
11. Applications containing false or inadequate information are liable for rejection and Bank reserves the right to blacklist those agencies.
12. The firms which do not fulfil prequalification criteria shall not be considered for selection and award of work.
13. The staff deployed by the firm at site should have adequate experience and knowledge in their respective works.

(Signature & seal of Authorized person on behalf of the Firm / Agency / Bidder)



Checklist for Technical Evaluation

The bidders will be technically evaluated based on the parameters as follows:

Sr. No.	Description of Enclosure	Please tick or write
1.	Name of the firm and Composition of the Firm (Full particulars (whether the Bidder is an individual / partnership firm / company etc.) of the composition of the firm of Bidders in detail should be submitted along with the name(s) and address(es) of the partners, copy of the Articles of Association / Power of Attorney / any other relevant document.) (a.1) Registered Head Office Address (a.2) Local Office Address (a.3) Year of establishment	
2.	Address in Ahmedabad or Gandhinagar Municipality area (please submit address proof)	
3.	Registration (Please submit copies of requisite documents)	<div style="text-align: center;">GST</div> <div style="text-align: center;">PAN</div>
4.	Work Experience (Details of work experience design, supply, installation and commissioning of Rooftop or Ground Mounted grid connected Solar PV Power Plants project and per the requirements in the Technical Evaluation criteria supported by work orders indicating the value & general specification of work) (Bidder should have at least 07 years of experience)	<div>3 Works of Rs.10.50 Lakh each</div> <div>Or</div> <div>02 Works of Rs.13.13 Lakh each</div> <div>Or</div> <div>01 Work of Rs.21.00 Lakh</div>

5.	Credit worthiness of the Bidder (Please submit Audit Reports for 03 years) (The bidder should submit attested copy of the audited balance sheet and certified by CA for completed three financial years i.e. 2022-23, 2023-24, 2024-25 shall only be acceptable.		
6.	Turn Over : Should be more than Rs. 8.00 Lakh during the last three years ending 31 March 2025 (Please submit CA Certificate)		
7.	Copy of Electrical Contractor License(E&P), Electrical Contractor Registration(R&B Issued by the Competent Local Authority / State Government.		
8.	Earnest Money Deposit through NEFT: please submit requisite documents. In case of any exemption sought, please upload relevant and currently valid documents		
9.	Whether registered in the panel of other banks and other financial institutions and if yes, furnish the details of registration viz. names, category, and date of registration, etc.		
10.	Submit duly filled PCIP in soft copy along with tender documents.		

(Signature of the Bidder / Tenderer)



Section-I -Previous Experience

a) List of important works **EXECUTED** by the bidder during last **seven years individually costing Rs 10.50 Lakh each and above** with experience in executing design, supply, installation and commissioning of Rooftop or Ground Mounted grid connected Solar PV Power Plants project carried out for Public Sector Undertakings (PSUs) /Banks/Govt. Office etc. (Please attach extra sheets if required). (Indicate only 03 works)

S. No	Name of the work And Location	Solar system capacity in kW installed and commissioned.	Name & full postal address. Also indicate whether Government or Semi-Govt or PSU's	Work Order Amount (Rs)	Details of order And Commissioning Certificate issued by SNA and user	Any other relevant information
(1)	(2)	(3)	(4)	(5)	(6)	(7)

b) List of important **ON HAND** works costing **Rs.10.50 Lakh each and above** in the field of executing design, supply, installation and commissioning of Rooftop or Ground Mounted grid connected Solar PV Power Plants project carried out for Public Sector Undertakings (PSUs) /Banks/Govt. Office etc.. (Please attach extra sheets if required). (Indicate only 03 works)

S. No	Name of the work And Location	Solar system capacity in kW installed and commissioned.	Name & full postal address. Also indicate whether Government or Semi-Govt or PSU's	Work Order Amount (Rs)	Whether work was left incomplete or contract was terminated from either side? Give full details.	Any other relevant information
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Details of Key Technical & Administrative Personnel:**Details of Technical personnel**

SN	Name	Designation	Qualification	Professional Experience	No. of years associated with the firm

Details of Administrative personnel

SN		Name	Designation	Qualification	Professional Experience	No. of years associated with the firm

DETAILS OF THE BANK'S ACCOUNT

1.	Name of the Vendor / Firm / Contractor	
2.	Name of the Account Holder	
3.	Name of the Bank's branch and Address	
4.	Bank's Code and Branch's Code	
5.	IFSC Code of the Bank's Branch	
6.	Type of Account (Current/Saving/Cash credit)	
7.	Account Number	

Note: A copy of cancelled cheque in respect of the above account which is operated by the vendor must be enclosed

Place:

Date:

(Signature and Full Name of the authorized person with seal on behalf of Firm/Agency/Contractor)



GENERAL INSTRUCTIONS

Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW.

1. Before submission of the Offer, Bidders are required to make themselves fully conversant with the scope of the work, technical requirements and specifications, etc., so that no ambiguity arises on a later date in this respect.
2. If any information provided by the Bidders is found to be concealed, suppressed or incorrect at later date or during finalization of the Tenders or the Bidders withdraws their offer during finalization of the Tender, the Tender shall be liable to be rejected and company shall be debarred from executing any business with NABARD for the period of 2 years and the EMD of such Bidders shall be forfeited.
3. Any approach from the Bidders, his representative or his agent to influence the decision on the Offer, officially or otherwise, shall render the Offer liable to be summarily rejected.
4. RMD and EMD to be deposited through NEFT only. All the documents to be uploaded on GeM portal
5. Each page of the Offer document shall be signed and stamped by the Bidders as a token of acceptance to terms and conditions mentioned herein.
6. Tenderers are advised to visit the site and thoroughly understand the nature and scope of the works and be familiar with the site conditions before quoting. The amounts required to be quoted by the bidders are for a period of one year only.
7. Offers of only those firms or individuals, who are themselves technically capable and sound for providing such services and who give satisfactory evidence of such experience shall only be considered.
8. The general technical requirements mentioned are mainly for the guidance of the Bidders. These requirements are not intended to preclude ingenuity of designs or other improvements. If the Bidders proposes any deviation from these requirements those shall be considered provided they are necessary either to improve the utility, performance and efficiency or to secure overall economy. The Bidders shall give a separate list containing points of deviations in his offer from the specifications asked for.
9. In the event, the successful Bidders fails to accept the work order within specified time or withdraws his offer within the validity period or fails to accept the order for any reason whatsoever, then the earnest money deposited by the Bidders shall be forfeited by NABARD.
10. NABARD reserves the right to accept any offer based on its merits and NABARD is not bound to place the order with party having submitted the lowest offer. Thus party merely on the ground that their financial offer is lowest, does not necessarily qualify them for receiving the order.
11. Self certified copies of documents will be submitted in support of claims made by the party and party shall bring the original copies of documents for verification by NABARD



officials. If demanded, details of similar work done in last seven years along with copies of the orders and certificates from the customers to be attached with the Tender.

12. Selection will involve following stages i) Upload of e-Tender ii) Receipt of e-bids/e-tender iii) Opening of technical bids iv) Opening of financial bids v) Award of contract. Bid will consist of two parts i.e. Technical Bid and Financial Bid.

13. If for any reason, it is found that the Technical bid reveals the Financial Bid related details in any manner whatsoever, or, the Financial Bid is swapped in the section marked “Technical Bid”, the Bid document will be summarily rejected in the first instance itself.

14. Earnest Money Deposit (EMD): The Earnest Money Deposit is to be submitted only through online transfer of funds, before the submission of the tender, to the account number given below. EMD submitted through any other mode of payment shall not be accepted.

Name of the Account: NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT

Bank Name: NABARD

Branch Name: HEAD OFFICE , MUMBAI

IFS code: NBRD0000002

Account Number: NABADMN02

15. No interest shall be paid on the EMD submitted by the bidders. EMD of unsuccessful bidders would be refunded after the award of work to the successful bidders.

16. Tender for which the EMD amount has not been received in our bank account will not be accepted by NABARD except in case of MSEs as defined in MSE Procurement Policy issued by GoI. Such exemption shall be given only on submission of proof.

17. The EMD of successful bidder shall be adjusted by NABARD to RMD. The quantum of security deposit (RMD) shall be 5% of the bill amount. RMD will not bear any interest. It will be returned after defect liability period of 2 years .

18. Bidders are advised to visit the site(s) and thoroughly understand the nature and scope of the works and be familiar with the site conditions before quoting.

19. It may be noted that Price Bid shall be opened only in respect of those bidders who have complied with the requirements as laid down in technical bid. The decision of the Bank in this regard shall be final. In the event of intending bidder's failure to satisfy the Bank, the Bank reserves the right to reject the tender and not to open the price bid. In case of multiple L1 bids, the final selection of bidder is done by GeM through system logic and as per GeM procedure .

20. The bidders should quote their rates strictly adhering to Terms and Conditions stipulated in the Tender Document. Unsolicited correspondence after opening of the Tender shall not be entertained. Conditional / Deviational Tenders may be rejected without making any reference to the bidders.

21. NABARD will not be liable for any loss, damage, theft, burglary or robbery of any personal belongings, equipment or vehicles of the personnel of the contractor. No compensation shall be admissible for any loss suffered by the Contractor during the execution of the work. It shall be the Contractor's sole responsibility to protect NABARD's staff and his employees against accidents from any cause and he shall indemnify NABARD against any



claims for damage on account of injury to person or property, resulting from any such accidents with necessary Insurance cover.

22. NABARD will not be under any liability to pay any compensation to the persons deployed by the contractor if they sustain any injury etc., while discharging the duties in the said premises. The bidder shall get them insured against any liability under the Employee Compensation Act or any accident at its own cost. The Contractor should take necessary Insurance cover at his cost for his persons employed at site. The contractor should arrange to obtain necessary insurance cover (Workmen compensation policy and Contractors All Risk Policy) for the work at his cost and should be responsible for the safety of persons, employed by him. The Contractor shall be fully responsible and shall compensate NABARD with suitable Insurance cover in the event of any damage to men or material, injury/damage or death as the case may be, caused directly or indirectly due to the negligence of the Contractor or his agents and/or his employees or workmen. The insurance policy may be obtained in the joint name of NABARD (to be appeared first) and the contractors respectively for the insured amount to the amount of at least 1.25 times of the tender amount and the original Insurance policy may be deposited in NABARD. In case, no insurance policy furnished before commencement of the work, NABARD will take the policy on behalf of the contractor and recover the amount of premium, interest on premium etc. from them. The decision of NABARD in this regard shall be final and binding. The insurance policy shall be work and site specific.

23. Any damages caused to the building / premises during the execution of the work shall be made good by the Contractor and if necessary, through suitable Insurance cover at his cost.

24. The Contractor shall use necessary safety equipment and maintain all safety measures during the execution of works and ensure compliance of Safety Code as per Rules and Regulations in force. The contractor undertakes from the date of allotment of tender, at all times and from time to time to remain solely responsible to defend NABARD and to hold and keep NABARD and its officers harmless and indemnified against all actions, costs, expenses, damages, claims, suits or demands, or any loss or liabilities of whatsoever nature arising directly or indirectly and also for and against all or any action whether by way of labour or legal proceedings or otherwise which may be brought against the NABARD by any of the person employed by contractor or any other authority, arising out of execution of the contract including claims for all damages, costs, charges, expenses which NABARD may incur in respect thereof.

25. The Contractor shall monitor the on-going works or satisfactory completion of works or redressal of complaints through his staff.

26. Notwithstanding anything stated above, NABARD reserves the right to assess the bidder's capability and capacity to perform the contract, should the circumstances warrant such assessment in the overall interest of NABARD.

27. The decision of NABARD in awarding the work shall be final.

28. NABARD reserves the right to accept / reject any Tender either in whole or in part without assigning any reasons thereof, whatsoever and without entering into any further correspondence and hence, NABARD shall be under no obligation to accept the lowest or any other Tenders received in response to this Tender. The decision of NABARD in this regard shall be final and undisputable.

29. NABARD also reserves the right of supersession of any of the conditions stipulated in the Tender Document.



DECLARATION BY THE CONTRACTOR

We / I have read and understood all the instructions / conditions made above and we / I have taken into account the above Instructions / Terms and Conditions while quoting the rates. We / I accept all the above Terms and Conditions without any reservation, in all respects.

Date: Sign. And Stamp of the Bidders



ANNEXURE - A

GENERAL TERMS AND CONDITIONS

Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW.

1. The Bidders shall mean the Bidders/ Associate who's Offer shall be accepted by NABARD and shall include such Bidders/ Associate theirs, legal representatives, successors and assignees. Associate shall mean the business associate authorized and having valid agreement with Private/Public Sector Enterprise having two years experience in solar energy field with office in the State of Gujarat. The offer shall be considered on behalf of the Public Sector Enterprise and authority letter for submitting the Tender shall be furnished. If the Public Sector Enterprise directly participates in the Tender, Associate's offer shall not be considered. Consortium or Joint Venture is not allowed in this Tender.
2. The Bidders shall be deemed to have carefully examined all the papers, attached in the contract. If he has any doubt as to the meaning of any portion of any condition/ specification, etc. he shall before signing the contract submit the particulars thereof to NABARD in order that such doubts are removed.
3. The work, shall be completed within the completion period as mentioned in the work order, failing which penalty at the rate of 0.1 % per day or part of a day, subject to maximum of 10 % of order value shall be imposed as time is the essence of the contract. If the Bidders fails to complete the work within 3-month after scheduled date mentioned in order, NABARD reserves the right to cancel the order. This excludes delay in the completion of the work due to unforeseen reasons beyond the control and without fault and negligence of the Bidders including (but not restricted to) act of God or public anomie action of Government in its sovereign capacity, floods, epidemics, strikes, lockouts, fires and accidents. In the event of any of the aforesaid contingencies, the NABARD may be promptly kept informed by the Bidders with documentary proof within fifteen days of commencement and cessation of Force Majeure circumstances. Under such circumstances reasonable extension of time shall be granted by the NABARD.
4. Application for such extension must be made before the due date of completion of work as per work order. In the event of termination of the work order, NABARD shall be at liberty to get the remaining part of the work done through any other agency/Bidders in the manner and on the terms it thinks proper. If the cost of executing the work as aforesaid shall exceed the balance due to the Bidders, and the Bidders fails to make good the deficiency, NABARD may recover it from the Bidders in any lawful manner.
5. The Bidders shall not, transfer, assign or sublet the work under this contract or any substantial part thereof to any other party.
6. NABARD shall have at all reasonable time access to the works being carried out by the Bidders under this contract. the works shall be carried out by the Bidders to the satisfaction of the NABARD.
7. Any question, dispute or difference whatsoever arises between NABARD and Bidders, in connection with the work order, except as to matters, the decision for which has been specifically provided, either party may forthwith give to the other notice in writing of existence of such questions, dispute, difference and the same shall be referred to the sole arbitration of



a person nominated by the Chief General Manager of NABARD. This reference shall be governed by Indian Arbitration Act prevailing at the time of dispute and the rules made there under. The award in such arbitration shall be final and binding on all the parties. Work under the agreement shall continue during the arbitration proceedings unless the NABARD or the Arbitrator directs otherwise.

8. NABARD may at any time by notice in writing to the Bidders either stop the work altogether or reduce or cut it down. If the work is stopped altogether, the Bidders shall only be paid for work done and expenses legitimately incurred by him as on preparation of the execution of the work upto the date on which such notice is received by him. Such expenses shall be assessed by NABARD whose decision shall be final and binding on the Bidders. If the work is cut down the Bidders shall not be paid for the work as so cut down, but in neither case shall be paid any compensation what so ever for the loss or profit which he might have made if he had been allowed to complete all the work included in the contract.

9. Prior to dispatch, the materials may be inspected and tested by NABARD or its authorized representative at the Bidder's works. Bidders shall inform NABARD for such inspection at least 7 days in advance before the probable date of dispatch. If the bidder himself is not the manufacturer of components, the pre-dispatch inspection can be offered at manufacturer's facilities/ premises.

10. The system supplied or installed shall be guaranteed by the Bidders for a minimum period of 2 years in regard to quality of material, workmanship, performance, efficiency, installation, etc. Defects developed in the system within guarantee period, shall be rectified by the Bidders at his own expense promptly. In case the defects are not rectified within 2 days of the receipt of the complaint by the Bidders, NABARD shall have full liberty to remove such defect or undertake such repairs as may be necessary to restore the system in working condition. The expenditure so incurred by NABARD shall be deducted from Bidder's pending claims, security, etc. and if necessary may be recovered in other mode provided under the law. In the event of

11. Failure of the complete system, if necessary, the whole system shall be replaced by the Bidders promptly.

12. Notices, Statements and other communications sent by the NABARD through registered post to the Bidders at his specified address shall be deemed to have been delivered to the Bidders.

13. The work shall be carried out by the Bidders with prior approval of NABARD. Work carried out without NABARD's approval shall not be accepted and the NABARD shall have right to reject it and to recover the cost as so incurred, from the Bidders.

14. All equipment/material shall be suitably packed for transport/carriage at site and outdoor storage during transit as per best industrial practices and appropriate standards. The Bidders shall be responsible for any damage to the equipment during transit due to improper or inadequate packing. The cases containing easily damageable material shall be very carefully packed and marked with appropriate caution symbols i.e. 'FRAGILE, HANDLE WITH CARE' etc. The contents of each package shall bear marking that can be readily identified from the package list and packing shall provide complete protection from moisture, termites and mechanical shocks during shipment/transportation to site. Adequate protection must be provided for outdoor storage at site in tropical humid climate, wherever necessary proper arrangement for attaching signs for lifting shall be provided and all packages clearly marked with gross weight, signs showing 'UP' and 'DOWN' sides of boxes, contents of each package, order no. And date, name of the plant/equipment's to which the material in the



package forms the part of, and any handling and unpacking instructions considered necessary. The Bidders without any extra cost shall supply any material found short inside intact packing case. The Bidders shall ascertain prior to shipment, from concerned authorities, the transport limitations like weight and maximum allowable package size for transportation. All packing cases and packing material shall become the property of the purchaser.

15. The Bidders shall provide one copy of the instruction manual and routine maintenance manual in Gujarati with each item supplied or installed. These manuals shall contain all the relevant details and drawings required for proper maintenance of the system supplied or installed.

16. The Bidders shall not display the photograph of the work and shall not take advantage through publicity of the work without written permission of NABARD.

17. The Bidders should obtain approvals, if any, necessary for the work from the statutory bodies on behalf of NABARD. The Bidders shall assist NABARD fully in respect of any liaison with the Municipal or any other authority for necessary approval / permission with regard to the works. The fees and other statutory charges, if any, will be reimbursed to the Contractor based on the original receipts produced to NABARD.

18. The Bidders shall not directly or indirectly transfer, assign or sublet the Contract or any part of it, without written permission of NABARD.

19. The Bidders should quote their rates strictly adhering to Terms and Conditions stipulated in the Tender Document. Unsolicited correspondence after opening of the Tender shall not be entertained. Conditional / Deviational Tenders may be rejected without making any reference to the Tenderers.

20. No advance shall be paid towards mobilization and cost of materials.

21. The decision of NABARD in awarding the work shall be final and cannot be subjected to arbitration.

22. NABARD also reserves the right of supersession of any of the conditions stipulated in the Tender Document.

23. EMD shall be forfeited if the successful bidder refuses or neglects to execute the Contract within the 07 days from the date of awarding of contract.

24. The tender shall remain valid and open for acceptance for a period of 90 days from the last date of submission of tender.



DECLARATION BY THE CONTRACTOR

We / I have read and understood all the instructions / conditions made above and we / I have taken into account the above Instructions / Terms and Conditions while quoting the rates. We / I accept all the above Terms and Conditions without any reservation, in all respects.

Date: Sign. And Stamp of the Bidders



ANNEXURE - B

SPECIAL CONDITIONS

Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW.

Special conditions/instructions to the contractors:

1. Tender for installation of Grid Connected Solar System on NABARD buildings. The salient features and key provisions of the Tender:
2. In view of the requirement for installation of Grid tied Solar Photovoltaic rooftop system, tenders are invited from the reputed and experienced vendors for design, supply, installation, commissioning and 2 years comprehensive maintenance contract
3. The broad specifications of the system (Detailed Specifications are given in the Tender elsewhere) shall be as follows:

a. Solar PV Modules:- MONO-Crystalline make solar module not less than 500 Wp each and having valid IEC certificate. (Certificate to be submitted on short listing of successful Tenders). The PV Cell and the modules shall be of INDIAN MAKE. Necessary documents in this regards must be provided to NABARD.

The bidder shall be required to submit the Self declaration, regarding the Modules and Solar cells used under this supply are “Made in India”, from the concerned manufacturer of Solar Modules, before commissioning of the System. Such firm and Shortlisted bidder, those violate the requirement of Indian Make Solar Cell and Module shall be put under the blacklist, and or stop deal list as may be decided by the NABARD.

Violation of norms of Domestic Content Requirement (DCR) Under Solar PV projects will lead to penalties and action as mentioned in office memorandum of MNRE GOI vide letter no.283/2018-GRID SOLAR dated 20th February, 2018.

In absence of the ALMM, the Shortlisted bidder shall have to submit self-declaration regarding domestically manufactured Cell and Modules used in the SPV System in this project. Whenever, the ALMM list published by the MNRE, the Model and Manufactures of the Module and Cell shall be from the ALMM only used in the SPV System in this project.

b. Inverter:-IEC certified invertors within- built anti-is landing facility of a capacity plus minus 10 % of the aggregate capacity of the modules.

c. Mounting structure:- The mounting (Rectangular pipe / square pipe / circular pipe) with requisite cross bars, nuts and bolts, etc. shall be pre-galvanized or galvanized. The Rectangular / square /circular hollow pipe section used for the structure should have a minimum thickness of 2.0mm. other than above, the material thickness should be minimum 2.5 mm. A certificate of a structural engineer certifying the strength and stability of the mounting structure to withstand the weight and wind speed of 150 km/hour throughout the life span of 5 years of the system, shall be submitted by the



- vendors. The ground clearance of the bottom most edge of solar panel shall not be less than 1200 mm as per the site requirement.
- d. AC, DC cable shall be of ISI mark and reputed make.
 - e. Lightning arrest or shall be provided for each of the Solar Rooftop installations.
 - f. The system cost shall be inclusive of supply of solar modules, invertors, mounting structure, AC DC cables in RPVC conduit, AC - DB, DC – DB, earthing, LA, Bidirectional meter, Solar AC Meter and its installation.
4. The project completion period shall be 3 months from the 10th day of issuance of the work order. The delay if any in the specific completion period shall be dealt with on the basis of the certified documentary evidence of the Single Line Diagram(SLD) drawing, submission and approval to CEI, estimate generation and payment to DISCOM and application submission and approval of CEI for charging of system.
 5. The scope of regular cleaning of the modules for 2 years shall also be in the scope of vendor. The arrangement of required water etc for regular cleaning of the modules shall be in the scope of the vendor.
 6. Bidders are required to quote rates inclusive of Comprehensive Maintenance Contact (CMC) for the period of 2 years for the system which include module cleaning. The rates quoted shall be inclusive of charges for providing Routine Maintenance services at the site. end as per site requirements to ensure smooth and satisfactory performance of the system. Replacement of any components of the system is included in the scope of work of CMC. As per the format given in the bid document quarterly report shall be prepared and submitted to NABARD after providing necessary services.
 7. The capacity utilization factor (CUF) shall be maintained at 19 % and necessary efforts shall be made to achieve it by the bidder. In case the system fails to attain the required CUF annually, shortfall of energy to achieve 19 % CUF on the yearly basis shall be compensated by the bidder to NABARD at the rate equivalent to the prevailing DISCOM tariff during the year. Failing which NABARD may invoke the entire Performance Bank Guarantee. The calculation of CUF shall be on the basis of the generation recorded by the inverter at AC side / Solar system AC meter.
 8. Training of representative of the NABARD on the aspect of primary trouble shooting and Do's & Don'ts of the SPV systems, including general operation and maintenance, including lodging complaints & primary reporting.
 9. In case of any type of misappropriations, cheating or intention of cheating, frauds, irregularities, malpractice, etc. the NABARD reserves the right to cancel the order without giving any reasons thereof and forfeit the security deposit.
 10. It shall be the responsibility of the bidder to clean the modules throughout the 2 year CMC period to ensure a capacity utilization factor of 19 % on annual basis to be measured at inverter/ Solar Meter, until the end of 2 year, inclusive of degradation, if any, of the module and /or inverter. The bidder shall ensure shadow free installation and easy access to the system monitoring, repairs etc.
 11. It shall be mandatory for the vendor to visit the system installation site every 3 month and submit a report to NABARD duly signed by the authority of NABARD office for the system working satisfactorily, in prescribed format, including the electricity generation record of the solar meter and Bi-directional meter reading.



12. The capacity utilization factor (CUF) of the solar power plant shall not be less than 19 % on annual basis, during the two year CMC period. The capacity utilization factor (CUF) shall be maintained at 19% and necessary efforts shall be made to achieve it by the bidder. In case the system fails to attain the required CUF annually, the system shall be deemed to underperforming. The calculation of the CUF shall be on the basis of the generation recorded by the inverter / solar system AC meter. The shortfall of energy to achieve 19 % CUF on the yearly basis shall be compensated by the bidder to NABARD at the rate equivalent to the prevailing DISCOM tariff during the year. Failing which NABARD may invoke the entire Performance Bank Guarantee.

13. **SPECIFICATIONS:** The specifications of SPV systems, for which Tenders are invited, The Test Report(s) of each of the components/ systems mentioned shall be uploaded/ attached with the Tender.

14. **AFTER SALES SERVICES:** Bidders shall have well established network of service centers within the state and shall have adequately trained staff available at service stations for repair and maintenance of Solar PV Systems.

15. Bidders will ensure that necessary spares are always available with their service centers to provide necessary after sales service during the warranty period.

16. The NABARD reserves right to reject any or all offers.

17. Conditional Tender or Tender with deviations shall be out right rejected at discretion of NABARD.

18. Notwithstanding anything contained therein the laborers, workmen, supervisors and other employed persons by the Contractor for the purpose of the works shall for all purposes be regarded as the Contractor's employees. Therefore, neither the contractor nor any of such employees shall have any right to complain or claim against the bank. The National Bank also shall have no concern with them and shall not be liable to make any payment to or any contribution on account of them.

19. To ensure that your offer submitted to NABARD is complete in all respects, please go through the following checklist and tick mark for the enclosures attached with your offer:

Sl	Description	Attached/ Not Attached	Page No. if Attached
1	General Information about the bidder (Profile)		
2	Earnest Money Deposit in the prescribed form		
3	The original document scanned and uploaded on GeM		
4	A Copy of Electrical Contractor Registration born by R&B		
5	A Copy of Electrical Contractor License born by Energy and Petrochemical Department		
6	A copy of GST Number, Permanent Account Number(PAN)		

7	Details of similar grid connected solar roof top work Experience in Government Sector done in last three financial years along with copies of 3-A Form as per the Offer Evaluation Criteria and as per Annexure-1 (3-A Form Mandatory Doc.)		
8	Details of Technical staff available as per Annexure-2 of the Tender document		
9	Declaration of the Bidders about any relatives working with NABARD as per Annexure-3 of the Tender document		
10	For Turn over of company for last 3 years pre bid, 2022-23, 2023-24 and 2024-25 practicing CA/ CS certificate attached., Last 3- Year Income Tax Return		

Date:

Sign. And Stamp of the Bidders



ANNEXURE

WORK SCHEDULE, PAYMENT TERMS AND PENALTY

TIME SCHEDULE: It is very critical to complete the work as per the order given by the NABARD; so as to complete the work within 3 months from the date of order. In the event of failure to supply of systems as per order, will lead to forfeiture of the Security Deposit up to 100% and will lead to disqualification of the Bidders for transacting business with NABARD for at least three years or the time duration as may be decided by the NABARD.

The Bidders shall arrange to provide to NABARD a SPV instruction manual. The Bidders shall also arrange to impart training about routine maintenance procedure. Copy of the same be submitted to Division of NABARD with the physical documents.

INSPECTION OF MATERIAL: The Bidders will offer complete Solar PV Systems for inspection at their works by NABARD before dispatch of material to site. Inspection can also be offered at one place in Gujarat (main distributor's place), where equivalent inspection facilities are available. The call for Pre-Dispatch Inspection for complete material shall include providing IV curves countersigned by manufacturer of panels. NABARD may carry out random testing of SPV systems at Bidder's factory for various parameters as per the specifications laid by NABARD. Visual inspection shall be carried for 100% of SPV systems. Bidders will intimate to NABARD in writing in advance for such inspections. If during the inspection the percentage of rejections exceeds 10% then the whole lot would be rejected. The rejected material is to be replaced with new material as per the specifications. The systems shall be offered for inspection again after necessary rectification. Expenses for such re-inspection shall be borne by the Bidders. NABARD reserves the right to inspect any number of SPV systems, any number of times at the site.

PAYMENT TERMS

- a) The payment terms will be made on reimbursement basis after submission of bill and verified by NABARD or its authorized personal. The amount of each claim shall be at least Rs 10.00 lakh (except the final bill). RMD @ 5% will be deducted from each payment.
- b) **TAX:-**Rates quoted by the Bidders will be inclusive of taxes, levies, duties, packing, forwarding, freight, insurance, loading unloading, supply, installation, commissioning, warranties and any/ all charges for successful Supply and Installation of the system at site locations and all expenses of marketing, commissions etc, insurance of the supplies upto Commissioning of the system and shall be borne by the bidder. Any damages to the supplies before commissioning of the system, irrespective of the reason for such damage, shall be to the account of the supplier.
- c) **GST:-** The rates quoted by the Bidders will be inclusive of GST or any other taxes applicable for such work. Any escalation in such taxes/ levies during the tenure of the offer/ order will not be paid by NABARD and Bidders are advised to take in to consideration any such escalations in the prevailing taxes/levies/duties. Income tax and/or other statutory taxes will be deducted from each payment. No increase in rates will be allowed during the entire contract period.
- d) **Payment of Bills:** The contractor shall produce his bills in duplicate addressed to the Chief General Manager, NABARD, Gujarat Regional Office, Ahmedabad. The bill shall



be paid by the bank after it has been verified by the bank's Caretaker / Technical Officer, Consultant and found to be in order.

- e) **Penalty:** The work, shall be completed within the completion period as mentioned in the work order, failing which penalty at the rate of 0.1 % per day or part of a day, subject to maximum of 10 % of order value shall be imposed as time is the essence of the contract. If the Bidders fails to complete the work within 3-month after scheduled date mentioned in order, NABARD reserves the right to cancel the order. This excludes delay in the completion of the work due to unforeseen reasons beyond the control and without fault and negligence of the Bidders including (but not restricted to) act of God or public anomie action of Government in its sovereign capacity, floods, epidemics, strikes, lockouts, fires and accidents. In the event of any of the aforesaid contingencies, the NABARD may be promptly kept informed by the Bidders in writing with documentary proof within fifteen days of commencement and cessation of Force Majeure circumstances. Under such circumstances reasonable extension of time shall be granted by the NABARD.
- f) Application for such extension must be made before the due date of completion of work as per work order. In the event of termination of the work order, NABARD shall be at liberty to get the remaining part of the work done through any other agency/Bidders in the manner and on the terms it thinks proper. If the cost of executing the work as aforesaid shall exceed the balance due to the Bidders, and the Bidders fails to make good the deficiency, NABARD may recover it from the Bidders in any lawful manner.



ANNEXURE - C**Scope of Work****Installation, Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Usmanpura – 40 KW, and at (ii) NABARD Vihar, Navrangpura, Ahmedabad - 30 KW.**

The work is to be carried out on 'Turn Key Basis' which includes survey, design, supply of SPV systems with all accessories and equipment, metering, installation, testing, commissioning and maintenance services for 2 years, of the NABARD's identified sites with free replacement warranty on spare parts against manufacturing defects for applicable time period. It also includes obtaining permission of concern DISCOM and Chief Electrical Inspector (CEI) approvals.

A)	Preparation of Detailed Project Report (DPR) of the proposed Proposal of SPV Power Plant.
B)	Registration of the Project on GEDA online portal with necessary fees, Obtaining No objection certificate, net metering connectivity agreements from concerned DISCOM for grid connectivity and CEI's approval and payment of CEI Inspection Charges, Connectivity charges, Meter charges, Meter testing and SMC box charges etc EXCEPT charges for Strengthening of the DISCOM Network, if required.
C)	The work covers Design, supply, installation, commissioning and comprehensive maintenance for two years, including grid connectivity charges, meter charges etc.
D)	Design, supply, civil work, erection, testing and commissioning of SPV grid connected Power Plant as per schedule given in the work order.
E)	Installation of solar meter and bi-directional meters along with second line of protection in the system such as SPD etc
F)	Installation of Remote Monitoring facility along with necessary dongle etc.
G)	The scope of the work covers Checking System, Cleaning and washing of the Photovoltaic Modules regularly (4-times in a year) to ensure annual capacity utilization factor of 19 % During the 2 years CMC from the date of completion.

TECHNICAL SPECIFICATIONS FOR GRID CONNECTED SPV SYSTEMS

The proposed projects shall be commissioned as per the technical specifications given below. Any short comings will lead to cancelation of order in full or part as decided by NABARD. The specifications, in the GERC Regulation on Net Metering shall also be applicable.

DEFINITION

A Grid Tied Solar Rooftop Photo Voltaic (SPV) power plant consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls & Protections, interconnect cables, solar meter, bi-directional energy meter and switches. PV Array is mounted on a suitable structure. Grid tied SPV system is without battery and shall be designed with necessary features to supplement the grid power during daytime. Components and parts used in the SPV power plants including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., shall confirm to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

Solar PV system shall consist of following equipment/components.

- Solar PV modules consisting of required number of Crystalline PV modules.
- Grid interactive Power Conditioning Unit with Remote Monitoring System.
- Mounting structures.
- Junction Boxes.
- Earthing and lightening protections.
- IR/UV protected PVC Cables, pipes and accessories.
- Solar Meter and Bi-directional Energy Meter

SOLAR PHOTOVOLTAIC MODULES:

MONO-Crystalline make solar module not less than 500 Wp each and having valid IEC certificate. (Certificate to be submitted on shortlisting of successful Tenders). The PV Cell and the modules shall be of INDIAN MAKE. Necessary documents in this regard must be provided to NABARD.

The bidder shall be required to submit the Self declaration, regarding the Modules and Solar cells used under this supply are “Made in India”, from the concerned manufacturer of Solar Modules, before commissioning of the System. Those violate the requirement of Indian Make Solar Cell and Module shall be put under the black list, and or stop deal list as may be decided by the NABARD.

In absence of the ALMM, the Shortlisted bidder shall have to submit self-declaration regarding domestically manufactured Cell and Modules used in the SPV System in this project. Whenever, the ALMM list published by the MNRE, the Model and Manufactures of the Module and Cell shall be from the ALMM only used in the SPV System in this project.

The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286 and IEC-61646. In addition, the modules must conform to IEC61730

- a) For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61215,61646/IS 61701
- b) The total solar PV array capacity shall not be less than allocated capacity (kWp) and shall comprise of solar crystalline modules of minimum 500 Wp and above wattage with module efficiency not less than 20%. Module capacity less than minimum 500 watts shall not be accepted
- c) Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- d) PV modules must be tested and approved by one of the IEC authorized test centers.



- e) The module frame shall be made of corrosion resistant materials, preferably having anodized aluminum.
- f) The bidder shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid.
- g) Other general requirement for the PV modules and sub systems shall be the following:
 - i. The rated output power of any supplied module can have tolerance of $\pm 3\%$.
 - ii. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
 - iii. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
 - iv. I-V curves at STC shall be provided by bidder.

The following information must be mentioned in the RFID used on each modules (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).

- a) Name of the manufacturer of the PV module
- b) Name of the manufacturer of Solar Cells.
- c) Month & year of the manufacture (separate for solar cells and modules)
- d) Country of origin (separately for solar cells and module)
- e) I-V curve for the module Wattage, I_m , V_m and FF for the module
- f) Unique Serial No and Model No of the module
- g) Date and year of obtaining IEC PV module qualification certificate.
- h) Name of the test lab issuing IEC certificate.
- i) Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.

Warranties:

- a) **Material Warranty:**
 - i. Material Warranty is defined as: The manufacturer shall warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than 5 years from the date of sale.
 - ii. Defects and/or failures due to manufacturing
 - iii. Defects and/or failures due to quality of materials
 - iv. Nonconformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will repair or replace the solar module(s), at the Owners sole option
- b) **Performance Warranty:**
The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 5 year period and not more than 15% after ten years period of the full rated original output.

ARRAY STRUCTURE

- a) The mounting structure shall be hot dip galvanized with minimum 80 microns or shall be pre - galvanized with minimum 60 microns as per relevant BIS standard. Each structure shall have angle of inclination as per the site conditions to take maximum isolation. However



to accommodate more capacity the angle inclination may be reduced until the plant meets the specified capacity utilization factor requirement.

b) The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed in Gujarat (150 km/hr). It may be ensured that the design has been certified by a recognized Lab/ Institution in this regard. Suitable fastening arrangement such as grouting and calming shall be provided to secure the installation against the specific wind speed. Bidder has to submit the rooftop MMS Structural stability certificate from the valid License holder structure Engineer as format attached.

c) The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759, the mounting structure shall be hot dip galvanized with minimum 80 microns or shall be pre -galvanized with minimum 60 microns as per relevant BIS standard. The additional cost of the structure required, if any, shall NOT be the part of the bided price

d) Structural material shall be corrosion resistant and Electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts. Aluminum structures of proper strength can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.

e) The fasteners used shall be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels

f) Regarding civil structures the bidder need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof to avoid damage to the slab of the building.

g) The total load of the structure (when installed with PV modules) on the terrace shall be less than 60 kg/m².

h) The minimum clearance of the structure from the roof level shall be minimum 300 mm and above allowed. If not provided RCC slab only installation on GI Roof penal Mount on minimum 6" Aluminum Raining.

i) The module mounting structure shall be made of GI medium C class pipe (as per IS 1239 and Zinc coating as per IS 4736)/ GI Channel/GI square pipe/ GI Circular Pipe. The grouting of the structure shall be done by PCC 1:2:3, which shall withstand the wind speed of 150 km/hr. The Rectangular / square /circular hollow pipe section used for the structure should have a minimum thickness of 2.0 mm. other than above, the material thickness should be minimum 2.5 mm.

JUNCTION BOXES (JBs)

a) The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.

b) Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single /double compression cable glands. Provision of earthlings. It shall be placed at 5 feet height or above for ease of accessibility.

c) Each Junction Box shall have High quality Suitable Capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.

d) Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification

DC DISTRIBUTION BOARD



a) DC Distribution panel to receive the DC output from the array field. DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

AC DISTRIBUTION PANEL BOARD

- a) AC Distribution Panel Board (DPB) shall control the AC power from PCU/inverter and shall have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- b) All switches and the circuit breakers, connectors shall conform to IEC60947, part I, II and III/ IS60947 part I, II and III.
- c) The changeover switches, cabling work shall be undertaken by the bidder as part of the project.
- d) All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air -insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz
- e) The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- f) All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- g) Shall conform to Indian Electricity Act and rules (till last amendment).
- h) All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions

Variation in supply voltage	+/- 10 %
Variation in supply frequency	+/- 3 Hz

PCU/ARRAY SIZE RATIO

- a) The combined wattage of all inverters shall not be less than rated capacity of power plant under STC.
- b) Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

PCU/ Inverter

As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the system are termed the "Power Conditioning Unit (PCU)". In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the power conditioning unit. Inverter output shall be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

- Switching devices: IGBT/MOSFET
- Control: Microprocessor /DSP
- Nominal AC output voltage and frequency: 415V, 3 Phase, 50 Hz(In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.) or Single phase as per consumer requirements.
- Output frequency: 50 Hz
- Grid Frequency Synchronization range: + 3 Hz or more

- Ambient temperature considered: -200 C to 500 C
 - Humidity: 95 % Non-condensing
 - protection of Enclosure: IP-20(Minimum) for indoor.
 - IP-65(Minimum) for outdoor.
 - Grid Frequency Tolerance range : + 3 or more
 - Grid Voltage tolerance : - 20% & + 15 %
 - No-load losses : Less than 1% of rated power
 - Inverter efficiency(minimum): >95%
 - THD: < 3%
 - PF : > 0.9
- a) Single Phase / Three Phase inverter shall be used with each power plant system.
 - b) PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
 - c) The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power, inverter shall have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
 - d) Built-in meter and data logger to monitor plant performance through external computer shall be provided.
 - e) The power conditioning units / inverters shall comply with applicable IEC/equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
 - f) The charge controller (if any) / MPPT units environmental testing shall qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS std. The junction boxes/enclosures shall be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529specifications.
 - g) The PCU/ inverters shall be tested from the MNRE approved test centers /NABL /BIS /IEC accredited testing- calibration laboratories. In case of imported power conditioning units, these shall be approved by international test houses.

INTEGRATION OF PV POWER WITH GRID

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the grid comes into service PV system shall again be synchronized with grid supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid power connection need to be provided, as per regulation.

PLANT MONITORING

Remote Monitoring and data Remote Monitoring System software at the site with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the bidder. Provision for interfacing these data on NABARD server in future shall be kept.

METERING

- a) The solar and bi-directional electronic energy meter (0.5 S class) shall be installed for the measurement of import/Export of energy as per guidance of DISCOM.



- b) The bidder must take approval/NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to NABARD before commissioning of SPV plant.
- c) Reverse power relay shall be provided by bidder (if necessary), as per the local DISCOM requirement. Second line of protection such as no volt relay shall be provided with the system as per GERC regulations.

POWER CONSUMPTION

Regarding the generated power consumption, priority need to give for internal consumption first and thereafter any excess power can be exported to grid at APPC.

PROTECTIONS

The system shall be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

a) LIGHTNING PROTECTION

The SPV power plants shall be provided with lightning & over voltage protection. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection shall be provided as per IEC62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find an alternate route to earth. Lightning arrestor shall be provided for each of the Solar Rooftop installations.

b) SURGE PROTECTION

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement)

c) EARTHING PROTECTION

Each array structure of the PV yard shall be grounded/ earthed properly as per IS:3043-1987. In addition the lightning arrester/masts shall also be earthed inside the array field.

- i. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

d) GRID ISLANDING:

In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off immediately. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as “islands.” Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.

- i. A manual disconnect 4 pole isolation switch (RCCB) beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance.

CABLES

Cables of appropriate size to be used in the system shall have the following characteristics:

- i. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 standards
- ii. Temp. Range: -100C to +800C.



- iii. Voltage rating 660/1000V
- iv. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- v. Flexible
- vi. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) shall be insulated with a special grade PVC compound formulated for outdoor use.
- vii. Cable Routing/ Marking: All cable/wires are to be routed in a RPVC pipe/ GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- viii. The Cable shall be so selected that it shall be compatible up to the life of the solar PV panels i.e. 25 years.
- ix. The ratings given are approximate. All the cables required for the plant are to be provided by the bidder. Any change in cabling sizes if desired by the bidder/approved after citing appropriate reasons.
- x. Solar cable-Multi Strand, EC grade Annealed uniformly tin coated high conductivity copper conductor LSZH insulation.
Armored Cable - Overall XLPE insulation for UV protection Armored cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/equivalent BIS Standards as specified below: BoS item / component Standard Description Standard Number Cables General Test and Measuring Methods, XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC60332,754 part I, IEEE-383.
AC Cable:- Multi Strand, EC grade Cooper Equally Bunched 105° C HRFR insulation Single Core
Wire and multi core wire.
All wire/cable marking of NABARD name, size, IS marking, etc
- xi. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- xii. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

CONNECTIVITY

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the GERC regulation for Grid connectivity and norms of DISCOM and amended from time to time.

DRAWINGS & MANUALS

- i. Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical datasheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- ii. Approved ISI and reputed makes for equipment be used.

CAPACITY OF SOLAR PV SYSTEM ON THE ROOFTOP

The Solar PV system on the rooftop of the selected buildings will be installed for PV capacity permissible by Discom as per regulation issued by GERC.

SAFETY MEASURES

The bidder shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA guidelines etc.

DISPLAY BOARD



A display board shall be installed with each system of minimum size of 12" X 6" made from GI sheet of minimum 20 SWG. The display board should be fixed one near to solar meter and one at inverter place. The Text shall include Manufacturer's name and address, Phone, fax and mobile number for immediate contact in case of any failure of systems.

DOCUMENTATION

Two sets of installation manual / user manual shall be supplied along with the each power plant. The manual shall include complete system details such as array lay out, schematic of the system, inverter details, working principle etc. Step by step maintenance and troubleshooting procedures shall be given in the manuals. The module layout drawing has to be submitted to the NABARD for each site. 4 nos. set of single line diagram and licensed electrical contractors' certificate has to be submitted for each site.

SHADOW ANALYSIS

The shadow analysis of each site has to be carried out by Bidder and shall be submitted to NABARD, after placement of work order.

General Conditions: applicable to all the systems.

- PV modules used in solar power plants/systems must be warranted for their output peak watt capacity, which shall not be less than 90% at the end of 10 years and 80% at the end of the 25 years.
- The BoS items/components of the SPV power plants/systems deployed must confirm to the latest edition of IEC/equivalent BIS standards as specified below:

BoS	Applicable IEC/ equivalent BISS standard	
	Standard Description	Standard
Power Conditioners / Inverters*	Efficiency Measurements Environmental Testing	IEC 61683, IEC 600682 (6,21,27,30,75,78)
Cables	General Test and Measuring Methods PVC, Equally Bunched 105° C HRFR, LSZH, XLPE insulated cables for working Voltages up to and including	IEC 60227/IS694 IEC 60502/ IS 1554(part I&II) and other
Switches/ Circuit Breakers/Connectors	General Requirements Connectors-safety	IS/IEC60947partI ,II,I IEN 50521
Junction Boxes/ Enclosures for inverter/ charge controller/ luminaries	General Requirements	Enclosures IP 54 (for outdoor)/IP 21 (for indoor) as per IEC529

Above SPV Modules, Inverters, cables, wire, array structures, mounting structures and all required materials for solar roof top will be used on site after written approval of NABARD

* Must additionally conform to the relevant national/international Electrical Safety Standards. All wiring for rooftop and grid connected systems shall be in UV-resistant certified for solar application, concealed in galvanized/ UPVC cable trays with minimum 3 cm clearance from the terrace/ rooftop floor.



DOCUMENTATION ON ONLINE PORTAL

The bidder shall be required to apply, process and submit necessary documents as per required by GEDA / DISCOM/ CEI on portal and installation and commission shall also be documented by the bidder.

BRAND LIST

Sr. No	Item	Company/ make
1	Solar Panel - MONO-Crystalline Indian Make	Adani, Waaree Energies Ltd., Tata Power, Atmanirabhar, Sunnora, Panasonic, saatvik, rayzon And other
2	PCU/ Inverter	EVVO, Sungrow, Sineng Electric, SOFARSOLAR, Growatt, Power One, V-
3	DC Wire-Cable (Armoured & Flexible)	Axelon, Avocab, AllCab, Hitex Plus, ultracabe, Winflex, Polycabe
4	SWITCH GEARS MCBSP/ MCPDP/ TP	Schneider, L&T, Siemens, ABB, Indo Asian, Havells
5	Earthing/Lighting Arrester	Yansiearth Lead, Powertrac
6	ARRAY STRUCTURE	As Per The Specifications

Note : Above all kind of Solar and electrical related material must be approved before execution on site by NABARD.

Bidders Signature

Chief General Manager NABARD



ANNEXURE - D

Safety - Precautions

As a part of the Contract, the Contractor must satisfy the under mentioned safety requirements and must ensure at all times that these are followed without any deviations:

1. Smoking, Tobacco and alcohol is prohibited on the premises.
2. Any hot job (welding, soldering etc.) however small it may be or any job which involves upon flame or using a hot source or temporary electrical connections shall not be done without prior permission from the Bank's Technical Officer. No jobs involving heating are permitted to be carried out after office hours, holidays and Sundays without prior permission.
3. It is entirely the responsibility of the Contractor to see that safety appliances such as safety belts, lift lines, helmets, rubber gloves, etc. depending on the job are made available to his staff at Contractor's cost. A first aid box should be maintained by the contractor at the premises for his workers. If the contractor needs any suggestion on the matter, he can approach the Bank's Officer-in-charge but any lapse on safety will be viewed seriously.
4. The Contractor shall ensure that the persons posted for the work are well conversant with the operation of fire extinguisher.
5. The Contractor shall take all precautions to avoid accident and causes of accident. He must be careful regarding safety during working of his staff in the premises.
6. The bank shall not carry any responsibility in case of any accident to his worker in the premise due to no fault of Bank's working but merely due to negligence of his workers or lack of safety provided to them by and the Contractor.



Technical Inspection Report for Solar PV Rooftop Project (Submitted by TPI/Agency)

Report No .

Date of Inspection:

Name of EA :

Basic System Information

A.	Deptt. Registration Number / Consumer No.	:	
B.	Name of Beneficiary Organization	:	
C.	Contact Person	:	
D.	Address	:	
E.	District	:	

A. PV Module and Inverter Specification:

Sr.	Equipment	Rated Capacity of Solar Module in Watt(peak)More than 500 Wp	Make of Solar PV Module	No. of Modules	Type PV of Modules (Crystalline)	Model No.
1	PV Module					

B. Are the modules of Indian Make: YES / NO

If No, Please Provide to requisite details with supporting notes/documents.

Sr.	Equipment	Nominal / Rated A.C. Output of Inverter in kilo Watt. kW/KVA	Make of Inverter	No. of Inverters	Type of Inverter (Single/Three phase)	Model No.
2	Inverter					

Total Capacity of Solar PV System in kW DC:

Total Rated output fInvertersinkW/KVAAC:



Strings	Polarity (OK/NOTOK)	V (Volts)	I (Amps)	Power (Watt)	Remarks
String.1					
String.2					
String.3					

Details of Solar PV modules Installed

Sr. No.	Observation		Tick either of the one	Remarks
1.	PV Module complying IEC certificate	IEC61215/IS14286 IEC61853-I, IS 16170.I IEC61730 IEC 61701	OK Not OK	
2.	Are any Module broken/damaged		YES /NO	
3.	Physical Presence of snail, trail, micro cracks, white patch, browning		YES / NO	
4.	Module Earthing Properly done?		Yes/ No	
5.	Module Protection	Min. IP 65	OK Not OK	
6.	Module Interconnection cable connectors are protected against environment		OK Not OK	
7.	PV module are neat and clean		OK Not OK	
8.	PV Modules electrical connections are tight and secure		OK Not OK	

Details of AC Cable between Invertor & Meter supplied: _____
Meter

Length in

Cable Type & Size _____

Aluminum or Copper

Weather: ☐ ClearSky ☐ Cloudy ☐ Hazy ☐ Rainy

Notes:



Details of Module Mounting Structure (MMS)

Sr.	Observation		Please Mark/ Enter Relevant Block	Remarks
1.	Structure Material	Pre.Galvanized /Hot Dip Galvanized Iron	OK Not OK	
2.	Fasteners	Stainless Steel	OK Not OK	
3.	Structure Steel Thickness hollow section/other than hollow section	Min2.0 MM/ Min. 2.5 MM	OK Not OK	
4.	Structure Installed Properly		OK Not OK	
5.	Minimum height of bottom edge of PV modules from roof level in meter		meter	
6	Maximum height of PV modules from roof level in meter		meter	
7	Structure grouting/ Foundation		OK Not OK	

Any other observation, if any:

Details of DCDB

Sr.	Observation	Please Mark/ Enter Relevant Block		Remarks
1.	DCDB Installation	Outdoor Indoor		
2.	Fuse/MCB/ MCCB Protection	OK	Not OK	
3.	Surge Protection device available	OK	Not OK	
4.	DCDB Installed and mounted Properly	OK	Not OK	
5.	Cables terminated properly through glands on gland plate	OK	Not OK	

Details of ACDB



Sr.	Observation	Please Mark/Enter Relevant Block		Remarks
1.	ACDB Installation	Indoor	Outdoor	
2.	MCB/ MCCB/RCCB Protection	OK	Not OK	
3.	Surge Protection device available	Yes	No	
4.	No Volt Relay (NVR) for 10 kW above	Yes	No	N.A.
5.	ACDB Installed Properly	OK	Not OK	
6.	Cables terminated properly through glands on gland plate	Yes	No	

Voltage Measurement

Phase to Phase Voltage	R.N	Y.N	B.N	Total

Time: _____ AM or PM

Performance Ratio of the System

1.	Instantaneous AC Power in Watt at Inverter	:	
2.	Instantaneous Irradiance (Watt/m ²)	:	
3.	Module Area (m ²)	:	
4.	Total number of modules	:	
5.	Module Efficiency in %	:	
6.	Performance Ratio of the System (If PR is less than 70% than technical reason should be given)	:	

Calculation of Performance Ratio: Formula $\{Sr. 1 / (Sr. 2 \times Sr. 3 \times Sr. 4) \times Sr.No.5 / 100\} \times 100$

Details of Inverter

1.	Inverter Serial No:			
2.	Inverter IP Protection			
3.	Inverter Installation		Outdoor Indoor	
4.	Automatic Operation Including Wake-up, Synchronization And Shut Down		OK Not OK	
5.	Marking Of Inverter Capacity, Rating, Technical Specification	IEC 61727, IEC 61730, IEC 61683, IEC 60068.II (1,2,14,30)/ Equivalent BIS standard	OK Not OK	
6.	Inverter Installed Properly		Yes No	
7.	Cables Terminated Properly (Crimping And Lugging)		Yes No	
8.	DC Disconnect Available		Yes No	
9.	Terminal Earthing Effectively Earthed		OK Not OK	

Details of Earthing provided

Earth Conductor Material : CopperGalvanized MS Aluminium

Total Nos. of Earthing : Nos.

Earthing Conductor : As per IS 3043/IEEE80

Earth pit Construction : Chemical Charcoal Salt

Lightning Arrester (LA) : Franklin rode ES

Lightning Arrester(IEC62305) : OK Not OK

LA height from Installation : meter

Building	Earth Pit	Earth Strip Connection	
Building 1	Body Earthing Pit.1 (R < 0.5Ohm)	OK	Not OK
	Body Earthing Pit.2 1 (R < 0.5Ohm)	OK	Not OK
	Lightning Earthing Pit.1 (R < 0.5Ohm)	OK	Not OK
	Lightning Earthing Pit .21 (R < 0.5Ohm)	OK	Not OK

Details of Cables used

1.	Solar DC Cable	UV Protected	OK	Not OK	
2.	Solar DC Cable	Multi stranded Tinned Copper	OK	Not OK	
3.	Voltage Grade	600/ 1000 V	OK	Not OK	
4.	AC cable Insulation		PVC	XLPE	
5.	String Cable Size (mm ²)		1)	-	
6.	AC Cable Sizes (mm ²)		1) _____		
			2) _____		
7.	AC Cable Length (Meter)		Total length: _____ meter Length from Ground plinth to DISCOM _____ Energy meter : _____ meter		

Site Image 1: Solar PV Modules showing height of the installation from the roof: +

Upload

Site Image 2: Invertor, preferably with User or his representative: +Upload

Observation and Conclusion:

Note:

It is certified the system is installed / not installed satisfactory and is found to be as per / not as per the specification of GEDA.

	Report Prepared by	Checked by
Name		
Signature		
Stamp of TPI / Agency		

----End of the document----

Annexure 5 QUARTERLY MAINTENANCE & SERVICING REPORT FORMAT



(To be submitted on end of each quarter)

Date:

DETAILS OF SOLAR PHOTOVOLTAIC SYSTEM INSTALLED

1. Details of Beneficiary Name of Beneficiary: _____

Address: _____ Ta. _____ Dist. _____

Discom Consumer No.: _____

Deptt. Registration No.: _____

2. Details of EPC Agency

1. Name of Agency:

2. Work Order No & Date.:

3. Solar System Capacity (KW):

4. Date of Commissioning :

5. Servicing period : From to

3. TECHNICAL DETAILS

1. Module Capacity, Make And No of Module:

2. Invertor Capacity, Make and Sr no :

4. CHECK OF THE SYSTEM

1. Cleaning of dust from SPV panel : 2. Interconnection of modules, PCU etc. :

3. Fuse of distribution boxes, switches :

5. DIFFICULTIES IN OPERATION/ PROBLEM FACED BY USER, IF ANY:

6. DIAGNOSIS DETAILS/ REPAIR ACTION:

7. IS THE SYSTEM WORKING SATISFACTORILY: YES / NO. If 'NO', please give the reason & remedies.

8. GENERATION READING OF GRID CONNECETD SYSTEM ON THE DATE OF THE REPORT: METER INSTALLATION DATE:

Metering Point	Last quarter reading (kWh) Date:	Present quarter reading (kWh) Date:	Difference in kWh	Quarterly CUF (%)
Meter reading at Solar Meter (in kWh)				
Solar generation reading at Inverter (in kWh)				

Meter Reading of Bi-Directional Meter (Import and Export)(In KWh):

Formula for Quarterly Capacity Utilization Factor (CUF) = Energy measured (difference in kWh) / (90*24*installed capacity of the plant)

9. PERFORMANCE RATION OF GRID CONNECTED SYSTEM:

Calculation of Performance Ratio:



1.	Instantaneous AC Power in Watt at Inverter	:	
2.	Instantaneous Irradiance (Watt/m ²)	:	
3.	Module Area (m ²)	:	
4.	Total number of modules	:	
5.	Module Efficiency in %	:	
6.	Performance Ratio of the System (If PR is less than 70% than technical reason should be given)	:	

Calculation of Performance Ratio: Formula $\{Sr. 1 / (Sr. 2 \times Sr. 3 \times Sr. 4) \times Sr.No.5 / 100\} \times 100$

User Name & Signature
Signature

Date: (with rubber stamp)

Technician's
Name &
(with rubber
stamp)

Note: At end of 2 year following Document will have to submit with last Quarterly Maintenance and Servicing Report (QMR)

1. Photograph of Solar Rooftop System:- Yes/ No
2. Instantaneous AC Power in Kilo Watt at Inverter (Kw):-
3. Photograph of Inverter Generation E –total (KWh)
4. Photograph of irradiation of solar system by pyrometer (Kw/m²)
5. Photograph of Solar Meter Generation (Kwh)
6. Photograph of Bi Directional Meter Import reading (Kwh)
7. Photograph of Bi Directional Meter Export reading (Kwh)
8. Latest electricity bill of beneficiary
9. Performance Satisfactorily letter duly signed and sealed by the beneficiary against 2 years CMC Completion of Solar Rooftop System



FORMAT FOR WARRANTY CARD TO BE SUPPLIED WITH EACH SOLAR PV SYSTEM

1. Name & Address of the Vendor
2. Name & Address of Beneficiary Agency
3. Date of Commissioning of the system
4. Solar Roof Top system capacity in kW.

5. Details of PV Module/s
Make of PV Module

Rating in Watts of each Module

Total numbers of modules installed

Serial No(s)

Warranty valid up to

6 Details of Invertor
Make of Invertor

Rated Output of Invertor, kW (AC)

Total number of Invertors

Serial No(s)

Warranty valid up to

7 Designation & Address of the person to be
Contacted for claiming Warranty obligations.

We hereby provide aforesaid warranty and undertake to replace free of cost the PV
MOUDULES, Invertor if found to be mal functioning due to manufacturing defect.

(Signature)
Name & Designation
Name & Address of the Bidders
(SEAL)

Place & Date:

(During the warranty period State Agencies/users reserves the right to cross check the performance of the systems with the minimum performance levels specified in the specifications).



To,
.....

.....

Subject: Structural stability, sustainability against wind pressure and safety related aspects of mounting structure deployed in solar rooftops.

Sir,

<Name of the Company/Firm> (the “Company/Firm”) is SUCCESSFUL BIDDER of for implementation of the solar roof tops programme in semi Government sector by the virtue of being technically qualified for solar roof top Tender floated by during year 2025. 26 (the “Tender”). I, the undersigned <Name>, <Designation>, the Owner of Company/Firm have also agreed to abide by the terms and conditions and the technical specifications of the solar roof top PV system provided in the Tender document.

In accordance with the provision of the Tender, the minimum ground clearance of the bottom most edge of solar panel from roof level has been specified as 300 mm to 1200mm. Further that the structure design shall be such that it withstands the wind speed of 150 kmph and that the thickness of the structure material shall not less than 2.0 mm in case of GI Rectangular / Square / Circular hollow Pipe section and other than above the material thickness should be minimum 2.5 mm as per tender terms and conditions.

I/we hereby declare that the module mounting structure and all its components including but not limited to fixing of the solar panels to the structure, welded joints, fasteners, zinc spray, grouting/fixing of the structure to the roof surface etc. installed by us at all the solar roof systems registered with. under the Tender, have been designed to provide adequate stability to bear the load and to withstand the wind speed of 150 kmph. Further I/we certify that I/we have ascertained and vetted the design of the structure ourselves and by a Structural Engineer to ensure stability and safeness of each of the installation to sustain the wind pressure throughout the lifespan of the installation.

In this regard, we have also obtained the certificate of the Structural Engineer for the installation at <Name of Site> Capacity <KW> regarding the stability of the structure and its strength to sustain a wind speed of 150kmph. The copy of the certificates of the Structural Engineer is attached herewith.

I/we further undertake and assure you that the structural stability of the module mounting structure including all the components installed by us at above mentioned site is our responsibility throughout the life span of the solar rooftop PV system.

I/We also absolve Deptt. of any such responsibility of the safety and the stability of the structure and the solar panels, whatsoever that may arise during the lifespan of the solar roof top PV system. Thanking you,



Yours faithfully,

Signature

Name

Designation

Stamp of the Company/Firm

Encl: Certificates of the Structural Engineer



(CONCERN FORM)

To WHOSOEVER IT MAY CONCERN

The undersigned, a Structural Engineer/ FIRM, registered with <Name of the registering/licensing authority> (registered with any of the Municipal Corporation/ Municipality, Urban Development Authority) and having valid License/Registration Number

< >. The undersigned has analyzed the design of the mounting structure of the solar roof top PV system and its fixing with i) the roof surface and ii) the solar panels, installed by M/s. <Name of the Vendor> at the address mentioned below.

Address of the Installation: <Name of the beneficiary>

<Address #1>

<Address #2>

<City>

< Registration Number>

Upon satisfying myself on the analysis of the design of the mounting structure of the solar roof top PV system and its fixing with i) the roof surface and ii) the solar panels, I hereby certify that the design of the mounting structure installed at the above.mentioned address meets the strength and stability of the mounting structure to withstand the wind speed of 150 kmph and is safe throughout its life span. The total load of the system is within the permissible load bearing capacity of the roof.

This Certificate is issued on the request of <Name of the Supplier of SPV System>.

Name of the Structural Engineer	:	
Signature of the Structural Engineer	:	
Stamp	:	
Date	:	

(Structure drawing along with the structure design, part drawing, assembly drawing duly signed and approved to be submitted for each site to be attached)



ANNEXURE – E

(ON THE LETTER HEAD OF THE BIDDER)

DECLARATION

To

The Chief General Manager
NABARD
Gujarat Regional Office
Ahmedabad

Name of the firm/Agency_____

Sir,

1. I / We hereby declare that I/We have read and understood the General Instructions. General Conditions of Contract, detailed specifications and the conditions of work, etc. and hereby agree to abide by them.
2. This is to certify that I/We before signing this bid have read and fully understood all the terms and conditions and instructions contained therein and undertake myself/ourselves abide by the said terms and conditions.
3. I/We abide by the provisions of Minimum Wages Act, Contract Labour (Regulation and Abolition) Act, 1976 and other statutory provisions like Provident Fund Act, ESI Bonus, Gratuity, Leave, Relieving Charges, Uniform and Allowance thereof and any other charges applicable from time to time. I/We will pay the wages to the personnel deployed as per Minimum Wages Act as amended by the Government from time to time and shall be fully responsible for any violation.
4. I/We hereby confirm that the quotations shall remain in force and valid for acceptance for a period of not less than 90 (Ninety) days from the date of opening of price bid.

Date :

Place :

Seal & Signature of the Contractor



ANNEXURE – F

PRE CONTRACT INTEGRITY PACT

(To be submitted on Rs.300 Stamp Paper only on first page and remaining document on normal A4 size pages duly signed by the bidder)

Between

National Bank for Agriculture and Rural Development (NABARD) hereinafter referred to as “**The Principal**”

And

..... hereinafter referred to as “**The Bidder**”

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for Installation Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Opposite Municipal Garden, Usmanpura - 40 KW, and at (ii) NABARD Vihar, SV Desai marg, New Commercial Staff Society, Navrangpura, Ahmedabad – 30 KW at NABARD Tower, Opposite Municipal Garden, Usmanpura, Ahmedabad-380013 and at NABARD Vihar, St Xavier College Corner road, Ellisbridge, Navrangpura, Ahmedabad 380006 for the period 01 October 2025 to 30 September 2027. The Principal values full compliance with all relevant laws of the land, rules, regulation and economic use of resources and of fairness /transparency in its relations with its Bidder(s).

In order to achieve these goals, the Principal will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned below:

Section 1 – Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

- a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c. The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)

(1) The Bidder(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) commit themselves to observe the following principles during participation in the



tender process and during the contract execution:

- a. The Bidder(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b. The Bidder(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c. The Bidder(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d. The Bidder(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.
 - e. The Bidder(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
 - f. Bidder(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form which put their reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s) from the tender process.

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public



Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process.

Section 6 – Equal treatment of all Bidders

(1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors

(3) The Principal will disqualify from the tender process all bidders who do not sign the Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or are representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 – Independent External Monitor

(1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by the Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement. The Independent External Monitor appointed for NABARD is : **Shri Jagdeep Kumar Ghai, PTA & FE (Retd), Flat No 1032 A Wing, Vanashree Society, Sector 58 A & B, Palm Beach Road, Nerul, Navi Mumbai, 400706, email jkghai@gmail.com, Mob: 9869422244.**

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his/her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders as confidential. He / she reports to the Chairman, NABARD.

(3) The Bidder(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Subcontractors.

(4) The monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/ Sub-Contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non- disclosure of Confidential Information and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, NABARD and recuse himself/herself from that case.

(5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project, provided such meetings could have an impact on the contractual



relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit nonbinding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(7) The monitor will submit a written report to the Chairman, NABARD within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposal for correcting problematic situations.

(8) If the Monitor has reported to the Chairman, NABARD, a substantiated suspicion of an offence under the relevant IPC/PC Act, and the Chairman NABARD has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contract or 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings. If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharge/determined by the Chairman of NABARD.

Section 10 – Other provisions

(1) This agreement is subject of Indian Law, Place of performance and jurisdiction is the Regional Office of the Principal, i.e. Ahmedabad.

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(5) Issues like Warranty/Guarantee etc. shall be outside the purview of IEMs.

(6) In the event of any contradiction between the Integrity Pact and its Annexure, if any, the Clause in the Integrity Pact will prevail.

(For & On behalf of the Principal)

(For & on behalf of the Bidder)

(Office Seal)

(Office Seal)

Place _____



Date _____

Witness 1: _____
(Name &Address) _____

Witness2: _____
(Name &Address) _____



ANNEXURE-G

ARTICLES OF AGREEMENT (to be submitted by the successful bidder)

ARTICLES OF AGREEMENT made this _____ day of _____ between the National Bank for Agriculture and Rural Development (hereinafter called "the EMPLOYER") of the one part and _____ (hereinafter called "the Tenderer") of the other part.

WHEREAS the EMPLOYER is desirous of execution of Tender for Installation Testing and Commissioning of Solar Roof Top System at (i) NABARD Tower, Opposite Municipal Gaden, Usmanpura - 40 KW, and at (ii) NABARD Vihar, SV Desai marg, New Commercial Staff Society, Navrangpura, Ahmedabad – 30 KW, Ahmedabad 380013.

AND WHEREAS the Tenderer has agreed to execute upon and subject to the conditions set forth in the Price Bid and Conditions of Contract (all of which are collectively hereinafter referred to as "the said Conditions") the work shown upon the said technical specifications, and included in the Price Bid at the respective rates therein set forth amounting the sum as therein arrived or such other sum as shall become payable there under (hereinafter referred to as "the said contract amount").

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration hereinafter mentioned, the Tenderer will upon and subject to the conditions annexed, carry out and complete the supply/works shown in the contract, described by or referred to in the Schedule of Quantities and in the said conditions.
2. The EMPLOYER shall pay the Tenderer the said contract amount or such sum as shall become payable at the times and in the manner specified in the said conditions.
3. The said Conditions thereto and the documents attached hereto shall be read and construed as forming part of this Agreement and the parties hereto shall respectively abide by, submit themselves to the said Conditions and the correspondence and perform the agreements on their part respectively in the said conditions and the documents contained herein.
4. This Agreement and all documents herein submitted by bidders shall form the basis of this contract.
5. The Tenderer shall afford every reasonable facility for carrying out of all works of other Contractors employed by the EMPLOYER and shall make good any damage done to walls, floors, etc. after the completion of such works.
6. The EMPLOYER reserves to itself the right of altering the nature of work by adding to or omitting any items of works or having portions of the same carried out without prejudice to this contract.
7. Time shall be considered as the essence of this contract and the Tenderer hereby agrees to commence the work/ job within the seven days of receipt of the work order as provided for in the



said conditions and to complete the entire work within the time period prescribed below reckoned from the date of receipt of such work order subject nevertheless to the provision for extension of time.

8. All payments by the EMPLOYER under this contract will be made only at Ahmedabad. GST will be paid by NABARD. All statutory taxes/ TDS etc. will be deducted from the payment.

10. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Ahmedabad and only Courts in Ahmedabad shall have the jurisdiction to determine the same to the exclusion of all other courts.

11. That the tenderer has visited the site and fully understood the existing conditions of site for execution of work.

12. That the several parts of this contract have been read by the tenderer and fully understood by the tenderer.

13. IN WITNESS WHEREOF the EMPLOYER has set its hands to these presents through its duly _____s and the Tenderer has caused its common seal to be affixed hereunto and the said two duplicates/ has caused these presents and the said two duplicates here of to be executed on its behalf, the day and year first herein above written. (If the tenderer is a company).

Signature Clause

SIGNED AND DELIVERED by the National Bank for Agriculture and Rural Development by the hand of

Shri
(Name & Designation)

In the presence of:

Witness # 1

Witness # 2

Signature:

Signature:

Name:

Name:

Address:

Address:

SIGNED AND DELIVERED by the Bidder
by the hand of Shri



(Name and Designation)

In the presence of:

Witness # 1

Witness # 2

Signature:

Signature:

Name:

Name:

Address:

Address:



NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT
GUJARAT REGIONAL OFFICE, AHMEDABAD



Part-II
(Financial Bid)

FINANCIAL BID GUIDELINES

Rates quoted by Bidder will be for destination prices inclusive of taxes, levies, duties, packing, forwarding, freight, insurance, loading unloading, supply, installation, commissioning, connectivity charges, any TPI charges, meter charges etc. and any/ all charges for successful Supply and Installation of the systems with charges of two-year CMC. The system cost shall be inclusive of supply of solar modules, invertors, mounting structure, AC DC cables in RPVC conduit as per requirement on location (Upto 50 Meter/Building), AC DB, DC – DB, earthing, LA, Bidirectional meter, Solar AC Meter and its installation. In Case of HT Connection as per Discom Norms, Charges for HT Bidirectional Meter & Other associated electrical component paid by Bidder will be reimbursed as actual. No any differential additional Charges for LT Bidirectional meter will be reimbursed. The bidder has to include insurance charges, as a proof of evidence, bidder is required to submit the copy of insurance policy/document.

The scope of the bidder shall include the cost of the total system, installation and Commissioning, two years CMC charges, regular cleaning of the modules, submission of the Quarterly report in the format as specified in Annexure of the Tender as specified, DISCOM connectivity charges, System Strengthening Charges of the DISCOM, Bi directional meter charges, Inspection fees of CEI.

Work will be awarded to the bidder considering both the works of staff quarters and office building together.



ANNEXURE – H**PRICE BID – ROOF TOP SOLAR SYSTEM AT NABARD TOWER**

No	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
1	Providing and erecting Solar Roof Top -manufacturing mono crystalline solar panel minimum 500wp with a firm commitment to quality, adopting latest photovoltaic technologies and in accordance with Indian standards to ensure rugged construction , is certified too for proving its capability to function continuously without any deviation under harsh environment . including supporting GI /Aluminum Structure ad per attached detail specifications, rates inclusive of GST all Tax Warranties and Performance Warranty as per attached specification	40	KWP		
2	Switching devices: IGBT/MOSFET, Control: Microprocessor /DSP, Nominal AC output voltage and frequency : 415V, 3 Phase, 50 Hz(In case single phase inverters are offered , suitable arrangement for balancing the phases must be made .) or Single phase as per consumer requirements , Output frequency : 50 Hz, Grid Frequency Synchronization range : + 3 Hz or more , Ambient temperature considered : -20o C to 50o C, Humidity: 95 % Non-condensing, Protection of Enclosure : IP-20(Minimum) for indoor , IP-65(Minimum) for outdoor . Grid Frequency Tolerance range : + 3 or more, Grid Voltage tolerance : - 20% & + 15 % , No-load losses : Less than 1% of rated power, Inverter efficiency(minimum): >95%, THD: < 3%, PF : > 0.9, specification, and including main power power cable 25 mtr rates inclusive of GST all Tax				
3	Supplying, testing and Commissioning of DC/AC cabling, AC/DC distribution box etc. laying, display board, junction box, power consumption, lightning-surge-metering and earth protection as per attached specification list and IS Codes. rates inclusive of GST all tax				
4	Providing Comprehensive Maintenance Contact (CMC) for the period of 2 years for the system which include module cleaning in 4 month. all cable , connection, Connector etc checking and maintaining inclusive of charges for providing Routine Maintenance services yearly 3 times at the site . end as per site requirements to ensure smooth and satisfactory performance of the system . Replacement of any components of the system is included in the scope of work of CMC . CMC provide as per Tender detail specifications rates inclusive of GST and all Tax				
5	providing drawing, solar, manual, documentation on online portal at GEDA / DISCOM/ CEI , Shadow analysis as per attached tender specifications. rates inclusive of GST and all Tax and all duties/charges of GEDA and DICOM (FEES)				
				Total	

Date

Seal & sign of Bidder

Place



PRICE BID – ROOF TOP SOLAR SYSTEM AT NABARD VIHAR

No	Description	Total Qty	Unit	Rate (Rs.)	Amount (Rs.)
1	Providing and erecting Solar Roof Top-manufacturing mono crystalline solar panel minimum 500wp with a firm commitment to quality , adopting latest photovoltaic technologies and in accordance with indian standards to ensure rugged construction , is certified too for proving its capability to function continuously without any deviation under harsh environment . including supporting GI /Aluminum Structure ad per attched detail specifications, rates inclusive of GST all Tax Warranties and Performance Warranty as per attched specification	30	KWP		
2	Switching devices: IGBT/MOSFET, Control: Microprocessor /DSP, Nominal AC output voltage and frequency : 415V, 3 Phase, 50 Hz(In case single phase inverters are offered , suitable arrangement for balancing the phases must be made .) or Single phase as per consumer requirements , Output frequency : 50 Hz, Grid Frequency Synchronization range : + 3 Hz or more , Ambient temperature considered : -20o C to 50o C, Humidity: 95 % Non-condensing, Protection of Enclosure : IP-20(Minimum) for indoor , IP-65(Minimum) for outdoor . Grid Frequency Tolerance range : + 3 or more, Grid Voltage tolerance : - 20% & + 15 % , No-load losses : Less than 1% of rated power, Inverter efficiency(minimum): >95%, THD: < 3%, PF : > 0.9, specification, and including main power power cable 25 mtr rates inclusive of GST all Tax				
3	Supplying, testing and Commissioning of DC/AC cabling, AC/DC distribution box etc. laying, display board, junction box, power consumption, lightning-surge-metering and earth protection as per attched specification list and IS Codes. rates inclusive of GST all tax				
4	Providing Comprehensive Maintenance Contact (CMC) for the period of 2 years for the system which include module cleaning in 4 month. all cable , connection, Connector etc checking and maintaining inclusive of charges for providing Routine Maintenance services yearly 3 times at the site . end as per site requirements to ensure smooth and satisfactory performance of the system . Replacement of any components of the system is included in the scope of work of CMC . CMC provide as per Tender detail specifications rates inclusive of GST and all Tax				
5	providing drawing, solar, manual, documentation on online portal at GEDA / DISCOM/ CEI , Shadow analysis as per attched tender specifications. rates inclusive of GST and all Tax and all duties/charges of GEDA and DICOM (FEES)				
				Total	

Date

Seal & sign of Bidder

Place



The Rates quoted to be up to 02 decimal points only.

Place:

Date: