

RFP for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emission including Comprehensive Maintenance for Two (02) years at various places of the Chilika Lake, Odisha

NIT No.: 4110, Dated:28.12.2023

Contact details:

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Notice Inviting Tender (NIT)

NIT No.:4110, Dated:28.12.2023

Type of bidding: Domestic Competitive Bidding (DCB)

Mode of bidding: Open bidding, Single stage two envelope, E-bidding

Odisha Renewable Energy Development Agency (OREDA) invites e-tender for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emission including Comprehensive Maintenance for Two (02) years at various places of the Chilika Lake, Odisha.

The Schedule of Events is given below:

SI. No.	Events	Schedule
1.	Date of publication of NIT on E-procurement Website and OREDA Website	28.12.2023
2.	Due date of submission of pre -bid queries as per the OREDA format	06.01.2024, Time: 5.00 PM
3.	Date and time of Pre-bid Meeting through virtual mode https://meet.google.com/bcb-idtg-dcn	08.01.2024, Time: 12.30 PM
4.	Due date and time for submission of online copies of Technical Bid and Price Bid	25.01.2024, Time: 5:00 PM
5.	Due date and time for submission of hard copies of Technical Bid for select Bid Forms only	30.01.2024, Time: 5:00 PM
6.	Tentative date and time for the opening of Technical Bid for both online copies and hard copies, except Price Bid	31.01.2024, Time: 3:30 PM
7.	Due date and time for the opening of online Price Bid, applicable only for the Bidders whose Technical Bids shall be responsive	To be intimated later

The NIT providing requisite details about the bidding process shall be made available on the E-procurement Website (www.tenderwizard.com/OREDA) on or before the due date mentioned above. In addition, the NIT shall be provided on the OREDA Website (http://oredaodisha.com/) for viewing purposes only. The Bidders may write to us at the email id ceoreda@oredaorissa.com, at any time during the office hours for any additional information.

The Bidders are also requested to contact the E-procurement Service Provider (M/s. Tender Wizard) for online registration on the E-procurement Website. The Bidders may contact the E-procurement Service Provider at 080-40482000/ 121/ 133/ 140 and +91 70085 21627 at any time during the office hours for any additional information.

Note: OREDA reserves all the right to annul the bidding process and invite fresh Bids without liability or obligation for such invitation and without assigning any reasons.

-Sd-

Chief Executive

Disclaimer

To whomsoever it may concern, kindly note the following:

- This NIT is meant for the exclusive purpose of bidding against this NIT and shall not be transferred, reproduced, or otherwise used for purposes other than that for which it is specifically issued.
- Though adequate care has been taken for the preparation of this NIT, the Bidder shall satisfy itself that the NIT is complete in all respect. Intimation of any discrepancy shall be given to OREDA immediately. If no intimation is received from any Bidder in their pre-bid queries, it shall be considered that the NIT is complete in all respects and has been accepted by the Bidder.
- OREDA reserves all the right to modify, amend, or supplement this NIT by issuing Addendum from time to time in the interest of the Project.
- OREDA reserves all the right to extend the timelines mentioned in the Schedule of Events of NIT by issuing Corrigendum from time to time in the interest of the Project.
- While the NIT has been prepared in good faith, neither OREDA nor OREDA's employees or advisors make
 any representation, warranty, express or implied or accept any responsibility or liability, whatsoever, in
 respect of any statements or omissions or absence herein, or the accuracy, completeness or reliability of
 the information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy,
 reliability, and completeness of this NIT, even if any loss or damage is caused by any act or omission on
 OREDA's part.

Exhibit

Definitions

The following definition and abbreviation shall have the meanings hereby assigned to them, as mentioned under the description herewith:

Definitions and abbreviation	:	Description
AC	:	shall mean Alternating Current
Acceptance	:	shall mean acceptance of the Project and when the Acceptance Certificate is
		issued to the Successful Bidder and as per the meaning ascribed to it in
		SOW Clause 3.2.1.6
Acceptance Certificate	:	shall mean formal acceptance of the Project by OREDA by issuing an
		Acceptance Certificate, as per the meaning ascribed to it in SOW Clause
		3.2.1.6
Addendum	:	shall have the meaning ascribed to it in ITB Clause 1.2.3.3
Additional Performance	:	shall have the meaning ascribed to it in BDS Clause 2.1.3
Security	-	aball base the recenium equilibrium to it in COO Olesses 5.4.0
Amendment	:	shall have the meaning ascribed to it in GCC Clause 5.1.2
Applicable Law	:	shall mean all laws, bye-laws, statutes, treaties, ordinances, rules, policies,
		regulations applicable in India and the state of Odisha along with amendments, re-enactments, revisions, applications and adaptations thereto
		made from time to time and in force and effect, judgments, decrees,
		injunctions, writs and orders of any court, arbitrator or governmental agency
		or authority, rules, notifications, guidelines, circulars, orders and
		interpretations of any Government orders, court or statutory or other body
		having jurisdiction over the performance of the Scope of Work including
		applicable permits, as may be in effect at the time of performance of the
		Scope of Work, provided, however, that if at any time the Applicable Laws
		are less stringent than the standards set forth in the Work Order hereto, the
		standard set forth in this Work Order hereto, shall be deemed to be the
		standards under Applicable Laws
Authorized Signatory	:	shall mean the authorized signatory of the Bidder as per the power of
		attorney and Board Resolution issued by the Bidder
Bid		shall have the meaning ascribed to it in ITB Clause 1.3.3.1
BDS	:	shall mean Bid Data Sheet
Builder	:	shall mean the Successful bidder who shall build the new zero emission
		solar boat/ do the retro fitment in the existing boats.
CDA	ļ:	shall mean Chilika Development Authority
CEA	<u>:</u>	shall mean Central Electricity Authority
Clarification	ļ:	shall have the meaning ascribed to it in ITB Clause 1.2.3
Coercive Practice	:	shall have the meaning ascribed to it in ITB Clause 1.1.2
Collusive Practice	:	shall have the meaning ascribed to it in ITB Clause 1.1.2
Commissioning Report	:	shall have the meaning ascribed to it in Appendix Clause 7.5.4 and Appendix
		Clause 7.6.4
Commissioning	:	shall have the meaning ascribed to it in SOW Clause 3.2.2.4
Construction Manager	:	shall have the meaning ascribed to it in GCC Clause 5.4.1.2
Corrigendum	<u> </u> :	shall have the meaning ascribed to it in ITB Clause 1.2.3.2
Corrupt Practice	+:-	shall have the meaning ascribed to it in ITB Clause 1.1.2
DC	+:-	shall mean Direct Current
DCB	ļ:	shall mean Domestic Competitive Bidding
Defect Liability	+:-	shall have the meaning ascribed to it in GCC Clause 5.5.3
Defect Liability Period	<u> </u> :	shall have the meaning ascribed to it in GCC Clause 5.5.3
Delay Liquidated Damage	1:	shall have the meaning ascribed to it in GCC Clause 5.5.1
Department	1	shall mean the user department for which the Project will be developed
Detailed Workplan	:	shall have the meaning ascribed to it in GCC Clause 5.4.2.2

Definitions and abbreviation	:	Description
DSC		shall mean Digital Signature Certificate
Effective Date	+	shall mean the date of issuance of the Work Order
E-procurement Service Provider		shall mean M/s. Tender Wizard
E-procurement Website	:	shall mean www.tenderwizard.com/OREDA
Equipment	:	shall have the meaning ascribed to it in SOW Clause 3.2.1.2 and SOW Clause 3.2.2.2
Estimated Cost	:	shall mean the cost of the Project estimated by OREDA and shall have the meaning ascribed to it in ITB Clause 2.1.3
Fraudulent Practice	:	shall have the meaning ascribed to it in ITB Clause 1.1.2
FOR	:	shall mean Freight on Road
GCC	:	shall mean General Conditions of Contract
Generation Meter	:	shall have the meaning ascribed to it in Annexure Clause 7.5.1.13
Government	:	shall mean Government of India or Government of Odisha, as applicable
IACS	:	shall meanInternational Association of Classification Society
Incoterms	:	Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1er, 75008 Paris, France.
Initial Capex	:	shall have the meaning as per the formula provided in Annexure Clause 7.2.2
IWAI/ IWT	:	shall mean Inland Waterways Authority of India/Inland Water Transport
INR	:	shall mean Indian Rupees
Integrity Violation		shall have the meaning ascribed to it in ITB Clause 1.1.2
ITB	:	shall mean Instructions to Bidders
kW	:	shall mean kilo-Watt
Month	:	shall mean a calendar month
NIT	:	shall mean Notice Inviting Tender
CMC	• •	shall mean Comprehensive Maintenance Contract
CMC Manager	:	shall have the meaning ascribed to it in GCC Clause 5.4.1.2
Obstructive Practice	:	shall have the meaning ascribed to it in ITB Clause 1.1.2
OREDA	:	shall mean Odisha Renewable Energy Development Agency
OREDA Website	:	shall mean http://oredaodisha.com/
OREDA's Office Address	:	shall mean S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.
OREDA's Official Email Id	:	shall mean ceoreda@oredaorissa.com
OTDC	:	shall mean Odisha Tourism Development Corporation
Owner	:	shall mean the Beneficiary department, In this case Owner is OTDC/CDA as applicable
PKI	:	shall mean Public Key Infrastructure
Project Manager	:	shall have the meaning ascribed to it in GCC Clause 5.4.1.2
Prudent Utility Practices		shall mean those practices, methods, acts, equipment specifications, techniques and standards of safety and performance, as may be followed or employed in the performance of the Scope of Work and discharge of the obligations of the Successful Bidder and which (a) are generally accepted internationally for use in the solar power generation industry, taking into account conditions in India and specific to India/Odisha (as applicable), and includes the exercise of that degree of professional skill, diligence and judgment that would ordinarily be expected from a skilled and experienced Successful Bidder in connection with power stations of the same or similar size and type as the project, (b) are commonly used in prudent electric utility engineering, project management and operations, and (c) would be expected to result in performance of the Scope of Work in a manner consistent with Applicable Laws, reliability, health and safety of workers and community, environmental protection, economy and expediency;

	1	
PV	:	shall mean Photo Voltaic
QR	:	shall mean Qualification Requirement
NIT	:	shall mean Notice Inviting Tender
SCC	:	shall mean Special Conditions of Contract
Schedule of Events	:	shall have the meaning ascribed to it in the NIT
SOW	:	shall mean the Scope of Work
Retrofitted Boat	:	shall mean the retrofitment of solar panels, if applicableand electric
		propulsion system with battery in the existing boat
Successful Bidder	:	shall mean the Successful Bidder who is awarded the Work Order
Tax		shall mean all taxes and duties pursuant to any Applicable Laws (whether currently in force or coming into force on or after the last date for submission of online Bid), including, all goods and services tax, tax on the sale of goods (which includes but is not limited to customs duty, anti-dumping duty, basic customs duty, safeguard duty and import duties), duties, but not including income tax, corporation profits tax, capital gains tax and other amounts corresponding thereto and interest, penalty or any other levy applicable on the income, profits, fringe benefits, personal taxes on salaries earned by employees and further includes any interest, surcharge, penalty or fine in connection therewith which may be payable by either Party on such transaction, property, matter mentioned above;
TDS	:	shall mean Tax Deduction at Source
Technical Specification	:	shall have the meaning ascribed to it in Appendix Form 1 under
		Annexure Clause 7.5.1 and Appendix Form 1 under Annexure Clause
		7.6.1
Capex	:	shall mean the final price considered in the Work Order
UTR	:	shall mean Unique Transaction Reference number
Work Order	:	shall have the meaning ascribed to it in ITB Clause 1.6
Year	:	shall mean the calendar year
-		

Interpretation

In the Bidding Document and Work Order, except where the context requires otherwise:

- 1.1.1. words indicating one gender include all genders;
- 1.1.2. words indicating the singular also include the plural and words indicating the plural also include the singular;
- 1.1.3. provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- 1.1.4. "written" or "in writing" means hand-written, type-written, printed, or electronically made, and resulting in a permanent record; and
- 1.1.5. The marginal words and other headings shall not be taken into consideration in the interpretation of these conditions.

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1. Instruction to Bidders (ITB)

1.1. General

1.1.1. Scope of NIT

- 1.1.1.1. In connection with the NIT, OREDA issues this NIT containing all the terms and conditions mentioned herein.
- 1.1.1.2. The NIT along with the NIT and any Addendum, Corrigendum, and Clarification, to be issued from time to time, shall be collectively termed as the Bidding Document. Such a Bidding Document shall be published on the E-procurement Website. In addition, such a Bidding Document shall also be uploaded on OREDA Website, but for viewing purposes only.
- 1.1.1.3. The name of the SOW including the associated NIT no., NIT no. and other details are specified in Section 2 (BDS).

1.1.2. Integrity Violation

- 1.1.2.1. The Bidder observes the highest standard of ethics all the time.
- 1.1.2.2. OREDA defines, for the purposes of this provision, the terms set forth below as follows:
 - 1. "Corrupt Practice" means the offering, giving, receiving or soliciting, directly or indirectly, anything of value to influence improperly the actions of another Party;
 - 2. "Fraudulent Practice" means any act or omission including a misrepresentation that knowingly or recklessly misleads or attempts to mislead a Party to obtain a financial or other benefit or to avoid an obligation:
 - 3. "Coercive Practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any Party or the property of a Party to influence improperly the actions of the other Party:
 - 4. "Collusive Practice" means an arrangement between two or more Parties designed to achieve an improper purpose, including influencing improperly the actions of other Party;
 - 5. "Obstructive Practice" means
 - I. deliberately destroying, falsifying, altering, or concealing of evidence material to OREDA's investigation;
 - II. making false statements to investigators in order to materially impede OREDA's investigation;
 - failing to comply with requests to provide information, documents or records in connection with OREDA's investigation;
 - IV. threatening, harassing, or intimidating any Party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - V. materially impeding OREDA's contractual rights of audit or access to information;
 - 6. "Integrity Violation" is an act which violates OREDA's policies, including (a) to (e) given above in the ITB Clause 1.1.2.2 and the following abuse, conflict of interest, retaliation against whistle-blowers or witnesses, and other violations of OREDA's policies, including failure to adhere to the highest ethical standard.
 - 1.1.2.3. OREDA will reject a Bid if it determines that the Bidder has, directly or indirectly through an agent, engaged in Integrity Violation including but limited to any Corrupt Practice, Fraudulent Practice, Coercive Practice, Collusive Practice and Obstructive Practice:
 - 1.1.2.4. OREDA will impose remedial actions on any Bidder or an individual, at any time, in accordance with its policies and guidelines (both as amended from time to time), including declaring ineligible, either indefinitely or for a stated period of time, to participate in OREDA-managed, -administered, or -supported activities or to benefit from an OREDA-managed, administered, or -supported, financially or otherwise, if it at any time determines that the Bidder or individual has, directly or through an agent, engaged in Corrupt Practice, Fraudulent Practice, Coercive Practice, Collusive Practice, Obstructive Practice or Integrity Violation; and

1.1.2.5. OREDA will have the right to inspect the accounts, records, other documents, etc. of the Bidders and relating to the Bid submission and to have them audited at any point in time.

1.2. Contents of the NIT

1.2.1. Sections of the NIT

1.2.1.1. The NIT consists of the following Sections as indicated below and should be read in conjunction with the NIT and any Addendum, Corrigendum and Clarification.

Exhibits

- a. Definitions
- b. Interpretations
 - i. Section 1 Instructions to Bidders (ITB)
 - ii. Section 2 Bid Data Sheet (BDS)
 - iii. Section 3 Scope of Work (SOW)
 - iv. Section 4 Qualification Requirement (QR)
 - v. Section 5 General Conditions of Contract (GCC)
 - vi. Section 6 Special Conditions of Contract (SCC)
 - vii. Section 7 Annexure
 - 1.2.1.2. OREDA is not responsible for the completeness of the Bidding Document if they were not obtained directly from E-procurement Website.
 - 1.2.1.3. The Bidder is expected to examine the complete Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the Bid.

1.2.2. Clarification on NIT, Site Visit and Pre-Bid Meeting

- 1.2.2.1. A prospective Bidder requiring any clarification on the NIT shall contact at OREDA's Office Address or write to OREDA's Official Email Id, prior to the pre-bid meeting, in accordance with ITB Clause 1.2.2.2. The queries shall be raised as per the format provided in Annexure Clause 7.4.
- 1.2.2.2. The pre-bid meeting shall be conducted in the manner specified in Section 2 (BDS). The Bidder's designated representative may attend the pre-bid meeting. The purpose of the pre-bid meeting will be to clarify issues and to prepare Clarification against the queries received from the Bidders on any matter that may be raised at that stage. OREDA will respond to any query for providing Clarification in writing, provided that such queries are received as per the timelines given in the NIT and any Corrigendum.
- 1.2.2.3. The Clarification against the queries raised, without identifying the source of the prospective Bidder, shall be uploaded on the E-procurement Website and OREDA Website. Any modification to the NIT shall be made by OREDA exclusively through the issue of an Addendum.
- 1.2.2.4. Non-attendance at the pre-bid meeting will not be a cause for disgualification of a Bidder.
- 1.2.2.5. The Bidder is advised to visit and examine the Project site and its surroundings to obtain all information that may be necessary for the preparation of the Bids. The cost of visiting the Project site shall be at the Bidder's own expense.
- 1.2.2.6. The Bidder and any of its personnel and/ or agents will be granted permission by OREDA to enter the Project site for the purpose of such visit, but only upon the express condition that the Bidder, its personnel and/ or agents will release and indemnify OREDA and its personnel, agents, etc. from and against any liability in respect thereof, and the Bidder shall be responsible for any death or personal injury, loss of or damage to property, and any other loss, damage, costs, expenses, etc. incurred as a result of the inspection during the Project site visit.

1.2.3. Addendum, Corrigendum, and Clarification to the NIT

- 1.2.3.1. At any time, prior to the deadline for submission of Bids, OREDA may issue an Addendum, Corrigendum and Clarification.
- 1.2.3.2. OREDA may, at its discretion, extend the deadline for the submission of Bids by issuing a Corrigendum in order to give prospective Bidders reasonable time in preparing their Bids. At any point in time, the latest Corrigendum will supersede the Schedule of Events mentioned in the NIT or any previously issued Corrigendum.
- 1.2.3.3. OREDA may, at its discretion, modify or change any specific provisions of terms and conditions of the NIT or any Addendum issued previously by issuing an Addendum for such specific provisions. At any point in time, the provisions provided against a specific Clause in the latest Addendum shall supersede such provisions already provided in the NIT or any previously issued Addendum.

1.3. Preparation of Bids

1.3.1. Cost for preparation of Bid

1.3.1.1. The Bidder shall bear all the costs associated with the preparation and submission of the Bid, and OREDA shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

1.3.2. Language of Bid

- 1.3.2.1. The Bid, as well as all correspondence and documents for any communications exchanged by the Bidder and OREDA, shall be written in the English language only.
- 1.3.2.2. Any supporting documents and printed literature that are part of the Bid may be submitted in another language provided they are accompanied by an accurate translation of the relevant passages in the English language only, in which case, for purposes of interpretation of the Bid, such English translation shall govern. In case of any misrepresentations in the English language vis-à-vis another language, OREDA, at its discretion, can reject the Bid submitted by the Bidder on the ground of misrepresentation of the information.

1.3.3. Documents comprising the Bid

- 1.3.3.1. The Bid shall comprise of the Technical Bid and Price Bid. The Technical Bid and Price Bid shall be submitted online pursuant to ITB Clause 1.3.3.2 and ITC Clause 1.3.3.4 respectively, as per all the terms and conditions of the Bidding Document. In addition, the select original hard copies of the Technical Bid shall be submitted pursuant to ITB Clause 1.3.3.3 at OREDA's Office Address.
- 1.3.3.2. The online submission of the Technical Bid shall comprise the following:

submitted.

. The offille submission of the rechnical bid shall comprise the following.			
Bid Form	Particulars		
Bid Form 1 (Bid Processing Fee)	Copy of the "e-payment" for an amount and other details as mentioned in Section 2 (BDS) already made by the Bidder as per the various e-payment options (credit card, debit card, net baking, etc.) available on the E-procurement Website towards "Bid Processing Fee".		
	This shall be a non-refundable fee.		
Bid Form 2 (Cost of Bid)	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 1 of Section 7 (Annexure). Copy of the "Demand Draft" for an amount and other details as mentioned in Section 2 (BDS) issued by a nationalized/ commercial bank in India towards "Cost of Bid" issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha.		
	This shall be a non-refundable fee.		
	This shall be payable by all the Bidders, subject to any exemption. In case of an exemption as admissible, the copy of the proof of exemption issued by an appropriate government authority (as applicable) shall be		

This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 2 of Section 7 (Annexure).

Bid Form 3 (Bid Security)

Copy of the "Demand Draft" or "Fixed Deposit Receipt" or "Bank Guarantee" for an amount and other details as mentioned in Section 2 (BDS) issued by a nationalized/ commercial bank in India towards "Bid Security".

In case of a Demand Draft, it shall be issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha.

In case of a Fixed Deposit Receipt, it shall be pledged in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha and unconditionally discharged on demand. The Bidders must note that in case of absence of the endorsement that "This Fixed Deposit Receipt shall be unconditionally discharged in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha on demand" on the back of the Fixed Deposit Receipt, such Bid Security shall be liable for rejection.

In case of a Bank Guarantee, it shall be issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha with an expiry date and a claim date as mentioned in Section 2 (BDS).

This shall be payable by all the Bidders, subject to any exemption as provided in Section 2 (BDS). In case of an exempt as admissible, the copy of the proof of exemption issued by an appropriate government authority (as applicable) shall be submitted.

This shall be a refundable fee, subject to the various provisions as mentioned in ITB Clause 1.3.7.

Bid Form 4

This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 3 of Section 7 (Annexure).

Copy of the "Power of Attorney" issued in the name of the Authorized Signatory of the Bidder supported by the required Board Resolution for submitting the Bid on behalf of the Bidder.

This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 4 of Section 7 (Annexure).

Bid Form 5 (Covering Letter of Technical Bid)

(Power of

Attorney)

Copy of the "Covering Letter of Technical Bid" duly signed by the Authorized Signatory and stamped by the Bidder to unconditionally accept all terms of the Bidding Document along with an undertaking of select clauses of the Bidding Document.

Bid Form 6 (Technical Qualification) This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 5 of Section 7 (Annexure).

Copy of the "Technical Qualification" certificate duly signed by the Authorized Signatory and stamped by the Bidder citing the Bidder's technical qualification pursuant to the requirements mentioned under Section 4 (QR).

This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 6 of Section 7 (Annexure).

Bid Form Particulars Bid Form 7 Copy of the "Financial Qualification" certificate duly signed and stamped by a chartered accountant citing the Bidder's financial qualification (Financial pursuant to the requirements mentioned under Section 4 (QR). Qualification) This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 7 of Section 7 (Annexure).

Bid Form 8 (Test Certificates)	Copy of the declaration of the " Test Certificates " for the Equipment as issued in the name of the OEM from any valid MNRE/ NABL/Govt accredited test labs as given in as mentioned in QR Clause 4.2.1 and shall be in line with Appendix Form 8 of Appendix Clause 7.5.8 and Appendix Form 8 of Appendix Clause 7.6.8.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 8 of Section 7 (Annexure).
Bid Form 9 (Self-certificate)	Copy of the declaration of the "Self-certificate" duly signed by the Authorized Signatory and stamped by the Bidder to declare that it has not been debarred/ blacklisted/ defaulted by any Government, agency, Public Sector Undertaking (PSU), institution/ autonomous organizations in the past. In case of any such events, the Bidder shall provide the case details and its current status in the format therein.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 9 of Section 7 (Annexure).
Bid Form 10 (Undertaking for Indigenousness)	Copy of the "Undertaking for Indigenousness" certificate duly signed by the Authorized Signatory and stamped by the Bidder to showcase the use of domestic contents of the Equipment to be supplied during the performance of the Work Order.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 10 of Section 7 (Annexure).
Bid Form 11 (No Deviation Certificate)	Copy of the "No Deviation Certificate" duly signed by the Authorized Signatory and stamped by the Bidder stating that the Bidder has not taken any deviation in the Bidding Document.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 11 of Section 7 (Annexure).
Bid Form 12 (Registration details)	Copy of the relevant documents issued by an appropriate Government authority in India.
,	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 12 of Section 7 (Annexure).
Bid Form 13 (PAN)	Copy of the PAN card of the Bidder. This is a mandatory submission and shall be submitted as per the
Did Farm 44	requirements given in Bid Form 13 of Section 7 (Annexure).
Bid Form 14 (GST	Copy of the "GST Certificate" of the Bidder.
Certificate)	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 14 of Section 7 (Annexure).
Bid Form 15 (Income Tax Return)	Copy of the last three (3) assessment year's "Income Tax Return" filing document.
rotainy	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 15 of Section 7 (Annexure).
Bid Form 16 (Quality	Copy of the declaration of "Quality Assurance" of the Bidder.
Assurance)	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 16 of Section 7 (Annexure).
Bid Form 17 (Summary of the Bidder)	Copy of the "Summary of the Technical Bid" in Microsoft .xls or .xlsx format as per the checklist given therein.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 17 of Section 7 (Annexure).

Bid Form	Particulars
Bid Form 18	Copy of the "Covering Letter of Price Bid" duly signed by the Authorized
(Covering letter of Price Bid)	Signatory and stamped by the Bidder to unconditionally accept all terms of the Bidding Document.
,	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 18 of Section 7 (Annexure).

1.3.3.3. The hardcopy submission of the Technical Bid shall comprise the following:

Bid Form	Particulars
Bid Form 2 (Cost of Bid)	Original of the "Demand Draft" for an amount and other details as mentioned in Section 2 (BDS) issued by a nationalized/ commercial bank in India towards "Cost of Bid" issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha.
	This shall be a non-refundable fee.
	This shall be payable by all the Bidders, subject to any exemption as provided in Section 2 (BDS). In case of an exempt as admissible, the copy of the proof of exemption issued by an appropriate government authority (as applicable) shall be submitted.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 2 of Section 7 (Annexure).
Bid Form 3 (Bid Security)	Original of the "Demand Draft" or "Fixed Deposit Receipt" OR the "Bank Guarantee" for an amount and other details as mentioned in Section 2 (BDS) issued by a nationalized/ commercial bank in India towards "Bid Security".
	In case of a Demand Draft/ Fixed Deposit Receipt, it shall be issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha.
	In case of a Bank Guarantee, it shall be issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha with an expiry date and a claim date as mentioned in Section 2 (BDS).
	This shall be payable by all the Bidders, subject to any exemption as provided in Section 2 (BDS). In case of an exempt as admissible, the copy of the proof of exemption issued by an appropriate government authority (as applicable) shall be submitted.
	This shall be a refundable fee, subject to the various provisions as mentioned in ITB Clause 1.3.7.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 3 of Section 7 (Annexure).
Bid Form 4 (Power of Attorney)	Original of the " Power of Attorney " issued in the name of the Authorized Signatory of the Bidder supported by the required Board Resolution for submitting the Bid on behalf of the Bidder.
	This is a mandatory submission and shall be submitted as per the requirements given in Bid Form 4 of Section 7 (Annexure).

1.3.3.4. The Price Bid shall comprise the following:

Bid Form	Particulars
Bid Form 19	Copy of the "Price Bid" duly filled and to be uploaded on the e-
(Price Bid -	tendering portal.
Category A	
Bidder)	This is a mandatory submission and shall be submitted in Microsoft xls.
	Or .xlsx format only as per the requirements given in Bid Form 19 of
	Section 7 (Annexure).

Bid Form 20 (Price Bid – Category B Bidder)	Copy of the " Price Bid " duly filled and to be uploaded on the etendering portal declaring the acceptance to the lowest evaluated price at the L1 price as discovered during the bidding process.
,	This is a mandatory submission and shall be submitted in Microsoft xls. Or .xlsx format only as per the requirements given in Bid Form 20 of Section 7 (Annexure).

- 1.3.3.5. For online submission of the Technical Bid and Price Bid, the Bidder shall submit each Bid Form as a separate copy and name the Bid Form as given under the column "Bid Form" given in ITB Clause 1.3.3.2 and ITC Clause 1.3.3.4. For example, the name of the online copy while uploading Form 1 shall be "Bid Form 1 (Bid Processing Fee)" to be submitted either in .pdf or .jpg or .jpeg format.
- 1.3.3.6. The Bid Forms must be submitted without any alterations to the text, and no substitutes shall be accepted in whatsoever condition, else the Bids shall be liable for rejection.
- 1.3.3.7. In case a submission is a mandatory submission as per all terms of the Bidding Document then the Bidder shall adhere to the same, else the Bids shall be liable for rejection.

1.3.4. Bid Prices

- 1.3.4.1. The Bidder shall fill in the Price Bid in line with the instructions mentioned in the Price Bid format as given under Bid Form 19 and Bid Form 20.
- 1.3.4.2. The Bid prices in the Price Bid shall be made at FOR destination at Project Site basis, which means that the Bidder shall be responsible for bringing all Equipment to be used in this Project and maintain it in their safe custody until the Acceptance of the Project is completed with the issuance of Acceptance Certificate and beyond that during the CMC Period as per the terms and conditions of the NIT.

1.3.5. Currencies of Bid and Payment

1.3.5.1. The Price Bid shall be quoted by the Bidder entirely in the currency "Indian Rupees" or "INR".

1.3.6. Period of Validity of Bids

- 1.3.6.1. Bids shall remain valid for the time period as specified in Section 2 (BDS) after the last date of Bid submission as prescribed in the NIT or its subsequent Corrigendum. A Bid valid for a shorter period than the above shall be liable for rejection by OREDA.
- 1.3.6.2. In exceptional circumstances, prior to the expiration of the Bid validity period, OREDA may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 1.3.7, it shall also be extended suitably beyond the deadline of the extended validity period on a mutual basis beyond the initial validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.

1.3.7. Bid Security

- 1.3.7.1. The Bidder shall furnish Bid Security as per the Bid Form 3 pursuant to ITB Clause 1.3.3.2.
- 1.3.7.2. Unless otherwise specified in Section 2 (BDS), any Bid not accompanied by a fully compliant Bid Security in case one is required in accordance with ITB Clause 1.3.7.1, shall be liable for rejection by OREDA as non-responsive Bid.
- 1.3.7.3. If a Bid Security is specified pursuant to ITB Clause 1.3.7.1, the Bid Security of unsuccessful Bidders shall be returned within a maximum time period of thirty (30) Days upon the Successful Bidder submitting the required Performance Security pursuant to ITB Clause 1.6.3.
- 1.3.7.4. If a Bid Security is specified pursuant to ITB Clause 1.3.7.1, the Bid Security of the Successful Bidder shall be returned within a maximum time period of thirty (30) Days upon the Successful Bidder submitting the required Performance Security pursuant to ITB Clause 1.6.3.
- 1.3.7.5. The Bid Security received against the previous NITs shall not be adjusted towards the Bid Security to be submitted against this NIT.
- 1.3.7.6. The Bid Security shall be forfeited,
 - a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the respective Covering Letters of Technical Bid and Price Bid; or

- b) if the Successful Bidder fails to
 - I. accept the Work Order pursuant to ITB Clause 1.6;
 - II. furnish the Performance Security pursuant to ITB Clause 1.6.3; or
 - III. accept the arithmetical correction of its Price Bid pursuant to ITB Clause 1.5.6;

1.3.8. Format and Signing of Bid

- 1.3.8.1 The Bid Form as given in ITB Clause 1.3.3 or any electronic form, if any and as available on the E-procurement Website, or any external form in Microsoft .xls or .xlsx format for the Technical Bid and the Price Bid shall be duly filled and scanned copies or Microsoft .xls or .xlsx or electronic form as available on the E-procurement Website shall be duly uploaded as per the instructions mentioned in ITB Clause 1.4.1.1, unless a specific instruction provided therein in the NIT Document.
 - 1.1.1.1. The original documents of the Bid shall be typed or written in indelible ink and shall be signed by the Authorized Signatory supported by the seal of the Bidder. In case the original documents are issued by any third party (for example the chartered accountant, etc.) then the same shall be signed by a person duly authorized to sign on behalf of the third party supported by the seal of the third party along with other details as required.
 - 1.1.1.2. The name and position held by each person signing or accepting the authorization must be typed or printed below the signature.
 - 1.1.1.3. Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initiated by the person signing the Bid.

1.4. Submission and Opening of Bids

1.4.1. Sealing and Marking of Bids

1.4.1.1. The Technical Bid and Price Bid shall be submitted as per the procedures mentioned in Section 2 (BDS).

1.4.2. Deadline for submission of Bids

- 1.4.2.1. The Bids must be submitted to OREDA through E-procurement Website only and no later than the date and time indicated in the NIT or any Corrigendum.
- 1.4.2.2. OREDA may, at its discretion, extend the deadline for the submission of Bids through the publication of a Corrigendum in accordance with ITB Clause 1.2.3.2, in which case all rights and obligations of OREDA and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

1.4.3. Late Bids

1.4.3.1. OREDA shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB Clause 1.4.2. Any Bid (either online or offline) received by OREDA after the deadline for submission of Bids shall be declared as a late Bid. Such late Bids shall be liable for rejection online, and the online copy of the Bid uploaded on the E-procurement Website shall be sent unopened to "Archive" and shall not be considered at all any further for evaluation. In such a case, the hard copies in the original form shall be returned unopened to the Bidder.

1.4.4. Withdrawal, Substitution, and Modification of Bids

- 1.4.4.1. A Bidder may withdraw, substitute, or modify its Technical Bid or Price Bid after it has been submitted as per the procedure mentioned in the E-procurement Website and as per the instructions mentioned in ITB Clause 1.4.1.1.
- 1.4.4.2. No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the Bid validity period specified by the Bidder on the Covering Letters of Technical Bid and Price Bid or any extension thereof as per the terms of Bidding Document.
- 1.4.4.3. Bidder may modify or withdraw their Bids through the relevant provisions on the E-procurement Website until the last date for submission of Bid as per the timelines mentioned in the NIT or any Corrigendum.
- 1.4.4.4. The Bidders may modify, resubmit, or withdraw their Bids as per the provisions given on the E-procurement Website.

1.4.4.5. In the case of original hard copies of the Bidder, such Bids will be considered based on the latest submission made by the Bidder. In such a case, any previous original hard copies shall be returned unopened to the Bidder.

1.4.5. Acceptance/ rejection of the Bids

- 1.4.5.1. The Bids submitted by the Bidders shall be liable for rejection in case
- Exhibit 1. Any incomplete or non-submission of any mandatory Bid Form or document mentioned under online or hardcopy submission of Technical Bid pursuant to ITB Clause 1.3.3.2 and ITB Clause 1.3.3.3.
- Exhibit 2. Any incomplete or non-submission of any mandatory Bid Form or document mentioned under the online submission of Price Bid pursuant to ITB Clause 1.3.3.4.
- Exhibit 3. Late Bids received as per ITB Clause 1.4.3.
- Exhibit 4. Canvassing in any manner shall not be entertained and will be viewed seriously and shall be liable for rejection.
- Exhibit 5. The Bids are found non-responsive pursuant to all the relevant clauses in the Bidding Document.

1.4.6. Bid Opening

1.4.6.1. Technical Bid (Online and hard copies)

A. Online Technical Bid:

a. OREDA shall open the online Technical Bids on the E-procurement Website as per the timelines mentioned in the NIT or any Corrigendum.

B. Hardcopies of Technical Bid:

- a. OREDA shall open the hard copies of the Technical Bids at OREDA's Office Address as per the timelines mentioned in the NIT or any Corrigendum. Such Technical Bid shall be opened in the presence of Bidders' designated representatives who chooses to attend. In such cases, the Bidder's designated representative must carry a letter of authorization issued by the Bidder's Authorized Signatory.
- b. The Bidders' representatives who are present during the opening of hard copies of the Technical Bids may be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record.
- C. OREDA shall prepare a record of the opening of Technical Bids as per the internal guidelines notified from time to time.

1.4.6.2. **Price Bid (online)**:

- a) OREDA shall conduct the opening of the Price Bids for all Bidders who are responsive in their Technical Bids after the evaluation being conducted by OREDA pursuant to ITB Clause 1.5.
- b) The Price Bids shall be opened online after the complete evaluation of the Technical Bids by OREDA. OREDA shall open the online Price Bids on the E-procurement Website as per the timelines mentioned in the NIT or any Corrigendum.

1.5. Evaluation and Comparison of Bids

1.5.1. Confidentiality

- 1.5.1.1. Information relating to the examination, evaluation, comparison, and post qualification of Bids and recommendation for the issue of Work Order, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on the issuance of Work Order is communicated to all Bidders unless it is specifically required by OREDA to do such disclosure as per the specific requirements.
- 1.5.1.2. Any attempt by a Bidder to influence OREDA's decision in the evaluation of the Bids or issuance of Work Order may result in the rejection of its Bid.
- 1.5.1.3. Notwithstanding ITB Clause 1.5.1.2, from the time of Bid opening to the time of issuance of Work Order, if any Bidder wishes to contact OREDA on any matter related to the bidding process, it may do so in writing only.

1.5.2. Clarification of Bids

- 1.5.2.1. To assist in the examination, evaluation, and comparison of the Technical Bid and Price Bid, OREDA may, at its discretion, ask any Bidder for a clarification of its Bid. OREDA's request for clarification and the response shall be in writing only. No change in the substance of the Technical Bid or prices in the Price Bid shall be sought, offered, or permitted. OREDA reserves all the rights to evaluate any such response received from the Bidder based on the clarification to be sought.
- 1.5.2.2. If a Bidder does not provide clarification of its Bid by the date and time set in OREDA's request for clarification, such Bid shall be liable for rejection.

1.5.3. Examination of Technical Bids

- 1.5.3.1. OREDA shall examine the Technical Bid to confirm that all documents and information requested in ITB Clause 1.3.3.2 for online submission and ITB Clause 1.3.3.3 for hard copy submission have been provided in order to assess the completeness of the Technical Bid.
- 1.5.3.2. OREDA shall confirm that all the requirements have been provided in the Technical Bid in all respect. If any of the documents or information is missing, the Bid shall be liable for rejection.

1.5.4. Responsiveness of Technical Bid

- 1.5.4.1. OREDA's determination of a Technical Bid's responsiveness shall be strictly based on the contents of the Technical Bid, as mentioned in ITB Clause 1.3.3.2 and ITB Clause 1.3.3.3.
- 1.5.4.2. If a Bid is not responsive to the requirements of the NIT, it shall be liable for rejection by OREDA and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

1.5.5. Qualification of the Bidder

- 1.5.5.1. OREDA shall determine to its satisfaction during the evaluation of Technical Bids whether Bidders meet the qualifying requirements specified in Section 4 (QR).
- 1.5.5.2. The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 1.3.3.
- 1.5.5.3. An affirmative determination shall be a pre-requisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result in the disqualification of the Bid.

1.5.6. Correction of Arithmetical Errors

- 1.5.6.1. During the evaluation of Price Bids, OREDA shall correct arithmetical errors on the following basis:
 - If there is a discrepancy between the unit price and the Capex that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the Capex shall be corrected.
 - II. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail, and the total shall be corrected.
 - III. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to a) and b) above.
- 1.5.6.2. If the Bidder that submitted the lowest evaluated (L1) Bid does not accept the correction of errors, its Bid shall be disqualified, and its Bid Security shall be forfeited.

1.5.7. Evaluation and comparison of Bids

1.5.7.1. OREDA shall compare all responsive Bids to determine the lowest evaluated Bid, in accordance with ITB Clause 1.5.6.2.

1.5.8. OREDA's right to accept any Bid, and to reject any or all Bids

1.5.8.1. OREDA reserves all the right to accept or reject any Bid or to annul the bidding process or reject all Bids at any time prior to the issue of Work Order, without thereby incurring any liability to Bidders. In case of annulment, the Bids shall be liable for rejection online and the online copy of the Bid uploaded on the E-procurement Website shall be sent unopened to

"Archive" and shall not be considered at all any further for evaluation. In such a case, the hard copies in the original form shall be returned unopened to the Bidder.

1.6. Work Order

1.6.1. Award Criteria

- 1.6.1.1. The various categories of the Bidders considered in this Bidding Document are mentioned in Section 2 (BDS).
- 1.6.1.2. The Successful Bidders shall be selected as per the allocation procedures mentioned in Section 2 (BDS).

1.6.2. Issue of Letter of Intent

- 1.6.2.1. Prior to the expiry of the period of Bid validity, OREDA shall notify the Successful Bidder, in writing, that its Bid has been accepted. At the same time, OREDA may also notify all other Bidders of the results of the bidding. In addition, OREDA may publish the results on the OREDA Website and E-procurement Website.
- 1.6.2.2. OREDA shall issue a Letter of Intent to all selected bidder, as per LOI Form 1 under Section 7 (Annexure), subject to the Bidder whose Price Bid has been determined to be the lowest evaluated (L1) Bid and is responsive to the Bidding Document, provided further that the Bidder is determined to be qualified for the issuance of Letter of Intent satisfactorily.
- 1.6.2.3. Upon receiving the Letter of Intent, the Successful Bidder shall fulfil all other requirements given under the Letter of Intent and submit the below mentioned critical documents within a maximum time period of fifteen (15) Days from the date of Letter of Intent and provide its acceptance, without any fail, else such Bids shall be liable for rejection and the Bid Security shall be forfeited.

Critical documents
Acceptance to the Letter of Intent by signing the copy of the Letter of Intent
along with an official seal, date, and submission to OREDA
Submission of Performance Security as per ITB Clause 1.6.3
Submission of a Detailed Workplan in line with the Project Timelines mentioned in the SOW Clause 5.4.2.2 for the deployment of new zero emission solar boat or retrofitted boat separately (as applicable).
Submission of a site survey report with the finalization of the exact location of the Project and the plan for installation and deployment of solar/electric boat along with charging stations (as applicable).
Valid Test Certificates of the boats, electric propulsion system, solar photovoltaic module, and battery along with datasheets of all other Equipment of the Project for the implementation of solar /electric boat and retrofitted boat separately (as applicable).
Contact information of various OEMs for the solar photovoltaic module, inverter, battery, solar street lighting system and balance of systems of the Project for the implementation of solar /electric boat and retrofitted boat separately (as applicable). (as applicable).
Critical documents
Bill of materials along with spares

1.6.3. Performance Security

- 1.6.3.1. Within fifteen (15) Days of the receipt of Letter of Intent from OREDA as per ITB Clause 1.6.2, the Successful Bidder shall furnish the Performance Security as per LOI Form 2 under Section 7 (Annexure).
- 1.6.3.2. The Performance Security shall be denominated in Indian Rupees only.
- 1.6.3.3. The Performance Security shall be submitted as per the details given in Section 2 (BDS). The Performance Security shall be submitted only in the form of a Bank Guarantee and the Bank Guarantee shall be issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha for an amount, expiry date and claim date as mentioned in Section 2 (BDS).

1.6.4. Issue of Work Order

1.6.4.1. Failure of the Successful Bidder to complete all the formalities mentioned in the Letter of Intent pursuant to ITB Clause 1.6.2 shall constitute sufficient grounds for the annulment of the Letter of

Intent and forfeiture of the Bid Security. In that event, OREDA may issue the Letter of Intent to the next lowest evaluated (L2, L3, and so on in sequence) Successful Bidder at the same lowest evaluated (L1) price quoted by the first Successful Bidder. In all cases, the Bid of the Successful Bidder shall be responsive and is determined by OREDA to be qualified to complete the formalities satisfactorily. In case any of the Bidder from L2, L3, and so on in sequence does not accept the Letter of Intent, then OREDA shall have the right to select the Successful Bidder or annul the bidding process, at its own discretion.

1.6.4.2. Upon completion of all the formalities mentioned in the Letter of Intent within the stipulated timeline by the Bidder, OREDA shall issue the Work Order to the Successful Bidder within a maximum time period of fifteen (15) Days.

2. Bid Data Sheet (BDS)

2.1. Specific provisions of ITB

BDS	ITB	Detailed Clause			
Clause	Clause				
reference	reference				
2.1.1.	ITB Clause 1.1.1.3	Name of the Project: Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emission including Comprehensive Maintenance for Two (02) years at various places of the Chilika Lake, Odisha NIT no.: [xxx] dated [xx.12.2023] RFP no.: [xxx] dated [xx.12.2023]			
2.1.2.	ITB Clause 1.2.2.2	тте рге-ыа ттееш	ng shall be conducted thro	ough an online pre-	bia meeting.
2.1.3.	ITB Clause 1.3.3.2 and	Project Estimate Cost Excluding GST (INR)	Bid Security (INR)	Cost of Bid (INR))	Bid Processing Fee (INR)
	ITB Clause	2,35,00,000	6,00,000	10,500 + GST	3000 + GST
	1.3.3.3	The Bid Process at "Bengaluru".	ing Fee shall be made in	favour of "KSEDC	Limited" payable
2.1.4.	ITB	In case of the Bid Security submitted is in the form of a Bank Guarantee, the expiry date, and claim date are as follows: a) Expiry date: One hundred and eighty (180) Days from the original last date of submission of online Technical Bid b) Claim date: Twelve (12) Months from the date of expiry In case a Bidder is quoting a price less than the Estimated Cost, then the Bidder shall mandatorily deposit an Additional Performance Security in the form of a Bank Guarantee/Fixed Deposit Receipt and the Bank Guarantee/Fixed Deposit Receipt shall be issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha, for an amount equivalent to the difference of the amount of Estimated Cost and the Quoted price. This is to be uploaded online in the e-tender portal and the hard copy is to be submitted along with the other tender documents. This shall be valid for an expiry period of ten (10) Months from the last date of submission of Bid as per the NIT or any Corrigendum. The claim date shall be for a date, calculate for a period of twelve (12) Months from the date of expiry. This Additional Security shall be submitted as a part of the Price only and shall not be submitted under the Technical Bid by any chance; else the Bid shall be liable for rejection. This is a mandatory submission only for the Bidders who are quoting the prices less than the Estimated Cost in their Price Bid. This can be submitted as per Bid Form 3.			
	Clause 1.3.6.1	Bid validity period : Three Hundred Sixty Five (365) Days from the last date of Bid submission.			
2.1.5.	ITB Clause 1.4.1.1	Signature C b) The Bidde company id "Register M c) The unregis of M/s. KS	pating in the Bid, it is certificate (DSC) of class-lars are advised to regist on the E-procurement View to fill in the online registered Bidders are required EDCL Limited payable a grough e-payment mode	III only. ster their user id, Vebsite by clicking stration form. ed to pay a registra t Bangalore on the	password, and on the hyperlink tion fee in favour e E-procurement

therein. d) As soon as the verification is done by the E-procurement Website, the user id will be enabled/ provided e) After viewing the NIT on the E-procurement Website, if the Bidder intends to submit its Bid, the Bidder shall use the user id and password that has been received after registration and use the DSC. The step-by step instructions are given below: Insert the Public Key Infrastructure (PKI), which consists of the DSC in the system. Ensure that the necessary software of PKI has been installed. g) Click/ Double Click to open the Microsoft Internet Explorer h) Go to Start > Programs > Internet Explorer. Type the E-procurement Website address "www.tenderwizard.com/OREDA" in the address bar of Internet Explorer to access the Login Screen. Enter user id and password, click on "Go". Click on "Click here to login" to select the DSC and enter the DSC Password. Re-enter the user id and password. k) Click "Un Applied" to view/ apply for a new NIT. Click on the "Request" icon for online requests. After making the request, the Bidder shall pay the requisite Bid Processing Fee (as indicated in the NIT) through e-payment mode only available on the Eprocurement Website. The Bidders can download the Bidding Document by following the below steps. m) Click on the "Show Form" icon. n) Bidding Document will appear on the screen. o) Click "Click here to download" to download the Bidding Document. p) The Bidder shall submit the Bid either under Category A or Category B as per the terms of the Bidding Document. q) All the soft copies of the Bid shall be properly scanned and shall be legible and such softcopies shall be either uploaded in .pdf or.jpg or .jpeg format. r) Prior to submission, verify whether all the required documents as a part of Technical Bid and Price Bid have been attached and uploaded against the particular Bidding Document or not. s) The Price Bid shall be uploaded on the E-procurement Website only in Microsoft .xls or .xlsx format only. By no other means, except online through E-procurement Website, the Price Bid shall be accepted for evaluation of the Bids. The hard copies as required to be submitted shall be submitted OREDA's Office Address as per the timelines mentioned in NIT or any Corrigendum. u) Please note down or take a print of the bid control number once it is displayed on the screen. v) Bid opening events can be viewed online. w) The Bids submitted by one Bidder can be viewed by other Bidders. 2.1.7. **ITB Clause** Allocation of Projects: 1.6.1.2 The projects will be allocated to bidders subject to vendor qualifying the minimum qualification requirement as per section 4.1, 4.2, 4.3 and 4.4. The projects will be allocated to L1 bidder (as per bid evaluation mechanism. Note: The allotment of the projects and the areas shall be at the discretion of OREDA only.

2.1.8. ITB Clause **Performance Security:** 1.6.3.3 The Performance Security shall be submitted for an aggregate amount equivalent to ten percent (10%) of ordered value in two (02) parts, as given below: BG no. Amount **Expiry date** Claim date BG 1 Five percent Twenty (18) Months Twelve (12) Months from the date of (5%) of Initial from the date of Capex issuing Letter of Intent expiry BG₂ Five percent Thirty (30) Months Twelve (12) Months (5%) of Initial from the date of from the date of issuing Letter of Intent Capex expiry Each Bank Guarantee submitted towards the Performance Security shall be returned within a maximum period of thirty (30) Days of the expiry date of each of the Bank Guarantee.

3. Scope of Work (SOW)

3.1. About the Project

3.1.1.Introduction

Chilika Lake, situated in the eastern part of India, is a biodiversity site and is blessed with distinct assemblage of oceanic and fresh water. Being a blue lake lagoon, it is house to many migratory birds during the winter season and house of some endangered species of Dolphins. The lake has extremely rich fishery resources helps in generating instant employments and livelihoods to many fishers and non-fishers (dependent on tourism) residing in and around it. The boat motorization has resulted in climate vulnerability. To address the climate challenge and reducing the noise, water, and air pollution the Government of Odisha, wants to transit the water mobility sector in Chilika to clean mobility solutions.

3.1.1.1.

This Scope of Work shall be for the purpose of selection of contractor(s) to Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP electric/ zero emission solar boats, with zero emission including Comprehensive Maintenance for Five (5) years at various places of the Chilika Lake, Odisha. The procurement of new boats shall be collectively called the "Project".

3.1.1.2. The summary of the Project is mentioned below:

Package Number	Project details	Cumulative capacity
Package 1	Design, Engineering, Manufacturing, Supply, Transportation,	5
	Deployment of 20 seaterFRP zero emission(solar) electric	
	boats, including Comprehensive Maintenance for Two (02)	
	years at various places of the Chilika Lake, Odisha	

3.1.2. Objectives

The objectives of implementing this Project are to:

- a) Reduction of greenhouse gases;
- b) Improving the livelihood of local fishermen and people dependent upon tourism sector in Chilika:
- c) Support GoO in achieving NDC and SDG targets;
- d) Generate local employment.

3.2. Roles and Responsibilities

3.2.1.Roles and Responsibilities of the Successful Bidder for the deployment of Zero emission solar boats

3.2.1.1. **Design and Engineering**

- a) The Successful Bidder shall complete the design and engineering of the zero emission solar boat as per the Technical Specification given in SOW Clause 3.3.1.1 as per IWT / IWAI rules. Zero emission solar boat shall be designed and built completely under Class (any member of IACS) up to handing over of the zero emission solar boat / boat to the respective Corporation/OREDA. The Boat shall have a capability of quick turnaround.
- b) The Successful Bidder shall provide the shore charging station/infrastructure for charging of boats near the jetty (Fishing boats) and harbours (OTDC and CDA's tourism boats) as per CERC guidelines for the EV charging. The Successful Bidder shall ensure that the remotely monitored BMS (battery management system) is provided. In addition, the Successful Bidder shall share the remote communication protocol as well as the login credentials (username, password, etc.) to OREDA for each Zero emission solar boat/retrofitted boat.
- c) The Successful Bidder shall ensure that the module mounting structures must be designed to be completely non-invasive (without any grouting/ chipping) on the rooftop space. In this regard, an indicative design can be provided by the bidder.
- d) The Successful Bidder shall design for an adequate protection system as per the requirement of the site by taking lightning, wind speed, rainy season, other climatic conditions, sudden surges in voltage and current, etc.
- e) Depending on the actual site of deployment s, the Successful Bidder need to propose the design of module mounting structures and charging stations with due certification from a chartered engineer with regards to quality, durability and wind resistance capability for the abovementioned speed and install the same only after getting due approval from the Authorized Representative of OREDA.
- f) Boats are to be constructed in accordance with (comply with) approved drawings of any classification society (IACS).
- g) Immediately after placement of order, before commencement of work, the builder shall forward to the Client a Drawing Schedule indicating drawings that will be sent to Classification Society for approval before construction of Zero emission solar boat. Thereafter yard shall forward to the Client all drawings approved by Classification Society.
- h) All drawings shall be submitted to the Client in soft copy with suitable number of hard copies.
- i) The Successful Bidder shall mandatorily visit all the sites of deployment and submit the tentative battery capacity as well as motor capacity for all the boats along with indicating all wiring details, connectivity details, etc for required charging station prior to the procurement of Equipment and commencement of construction works at the ZERO EMISSION SOLAR BOAT site.
- j) The Successful Bidder shall submit the final design, single line diagram, etc. to OREDA and obtain the approval from OREDA prior to the commencement of pilot project.

3.2.1.2. Supply of Equipment

- a) The Successful Bidder shall be responsible for the supply of all Equipment including but not limited to zero emission solar boat, electric propulsion system, BMS, solar photovoltaic modules, module, mounting structures, inverters, batteries, chargers and the balance of systems to the designated sites.
- b) The Successful Bidder shall be responsible for procuring, packing, forwarding, loading, unloading, safekeeping, and handling of all Equipment including insurance coverage all the time until Acceptance of the zero emission solar boats pursuant to SOW Clause 3.2.1.6.
- c) Before ordering, manufacturing, or installing any major equipment like motors, engines/OBMs, Stern gear, DGs, ACs, Chairs, sofas, tables for seating, interiors etc., the builder shall forward detailed drawings, catalogues for prior approval of

OREDA/beneficiary department. Approval of the Classification society or Statutory Authorities shall be obtained prior to submission to the Client, where appropriate. Approval of any proposal, specification and drawings will not exonerate the bidder from the responsibility in connection with the correct functioning of the complete installation.

d) The Successful Bidder shall provide the Spares as given in SOW Clause 3.3.1.3 and shall ensure to maintain the safety stock all the time until the expiry of the Work Order, prior to which the Successful Bidder shall handover all the Spares in full to OREDA.

3.2.1.3. Installation

- a) The Successful Bidder shall be responsible for carrying out the installation of all Equipment as per the design, SLDs, etc. approved by OREDA pursuant to SOW Clause 3.2.3.1.
- b) The Successful Bidder shall ensure to have a clean and tidy installation of the solar/retrofitted boat. The Successful Bidder shall ensure to consider the safety aspects into consideration and shall not leave any loose cables to lie on the rooftops.
- The Successful Bidder shall install display boards mentioning the name of the Department, Name of OREDA, date of Commissioning, date of Acceptance, contact details of OREDA, CRC,
- d) The Successful Bidder shall install danger boards, safety boards, etc. at suitable locations as per the Applicable Law and Prudent Utility Practices.
- e) The Successful Bidder shall ensure to make the inverters, BMS, battery storage and control panels wall mounted / Floor Mounted to avoid any type of safety risk.
- f) The Successful Bidder shall ensure that earthing flats do not touch the roof/ walls at any place and sufficient insulators shall be provided for the same.

3.2.1.4. Providing Photographs:

a) Photographs of the craft at various stages of construction, the compartments and under water appendages after fittings out shall be taken and supplied at the time of delivery.

3.2.1.5. Supervision during construction:

a) The client's representatives must be permitted to inspect the construction at various stages.

3.2.1.6. Tests and Trials:

- a) A test and trial schedule shall be submitted by the yard to the client prior to commencement of lake trails, to allow monitoring of the construction and testing of the craft. The Owner's representative shall be notified of all tests and trails which are to be made in his presence. Tests and trails on the equipment / systems shall be carried out as per approved specifications. Trails are to be conducted in the presence and to the satisfaction of client representative. Results of the trials shall be recorded in appropriate forms / formats.
- b) All tests and trails required for the zero emission solar boat and the equipment shall be performed in compliance with the Statutory / Classification / Beneficiary's requirements.
- c) The Builder shall prepare and submit a detailed program of the relevant trials to the OREDA for approval, well in advance.
- d) Any remark made by the surveyors during the tests and trails shall be rectified by the Builder at no extra cost.

3.2.1.7. Lake trails

- a) On completion, the zero emission solar boat shall be subjected to lake trials to be carried out by and at the expense of the builder, who is to provide all necessary materials and services for operation of the zero emission solar boat during lake trials. The battery consumption along with the operating parameters of the main propulsion and the diesel engines shall be recorded during the trails during the "endurance test"
 - i. Speed test: The test shall be made under the maximum output of the engine and test shall consist of four runs, two up and two down of the test course. The mean of mean speed as per standard marine practice shall be calculated for arriving at the final speed of the craft.
 - ii. Endurance test: Endurance test shall be carried out at maximum output for four hours. Fuel consumption along with other parameters of the main propulsion system shall be measured for reference during endurance test.
 - iii. Manoeuvring test: The following tests shall be carried out:
 - 1. Crash stops astern and ahead test.

- 2. Astern test
- 3. Turning circle to port and starboard shall be carried out at maximum rpm and corresponding tactical diameter shall be worked out.
- 4. Other Trials
- b) After completion of installation works, the Successful Bidder shall complete the testing and Commissioning in the presence of the Authorized Representative of OREDA, and concerned officers of IWT, the Owner (CDA/OTDC/Fisheries department). The committee comprising of the above persons shall be termed as the Commissioning Committee.
- c) The operation of new boats will be tested for a period of one month till the design achieves the required speed, operational duration and other necessary requirements.
- d) The Successful Bidder shall take consultation from the Commissioning Committee on finalizing a date and time of testing and Commissioning.
- e) Upon completion of testing and commissioning, the Commissioning Committee shall issue the Joint Commissioning Certificate to the Successful Bidder as per the format given in SOW Clause 3.3.1.5.
- f) The testing and commissioning process shall be documented step-by-step as per the instructions given in the ReSolve Mobile App developed by OREDA through CRC.
- g) The format for the Commissioning Report is given in SOW Clause 3.3.1.4.

3.2.1.8. Onboard spares, tools & test equipment

a) Onboard spares for one year's service of the craft are to be provided for all equipment. These shall cover the requirements stipulated by classification society as applicable, and recommendations of the manufacturer. The list of onboard spares shall also be provided in soft and hard copy versions.

3.2.1.9. Preservation and care of machinery and equipment

a) It is the duty of the builder to maintain and preserve the main machinery and any other equipment ordered and delivered in advance, prior to installation, during the period of storage. The builder is responsible for the maintenance and upkeep of all machinery and equipment until acceptance of the craft by the Client. Care is to be taken in erecting the machinery onboard, so that no foreign matter such as metal cuttings, bolts, nuts etc are left in any place from which they might be displaced and cause damage to or derangement of machinery.

3.2.1.10. Guarantee:

a) The builder shall guarantee the hull of the craft and its complete installations, equipment, fittings and all other items against all defects of design, workmanship and material and satisfactory operation of the craft and performance of installed equipment, for a period of 12 months after its delivery. The defect liability period for Engines / OBMs, Gear Boxes, Generators is as per OEM terms and conditions. All defects that occur within this period are to be rectified free of cost by the builder, inclusive of supply of spare parts / material wherever required. Repairs are to be affected at the base port of the craft, to be specified by The Client. For items like paints respective department, will stand responsible for the consequential cost and labor cost in case of failure during the guarantee period.

3.2.2.Acceptance

- a. The performance and health of the ZERO EMISSION SOLAR BOAT will be monitored for a period of thirty (30) Days, from the date of Commissioning.
- b. The Commissioning Report followed during Commissioning as given in SOW Clause 3.3.1.4 shall be performed again before issuance of the Acceptance Certificate as per format given in SOW Clause 3.3.1.6.
- c. Upon Acceptance of the ZERO EMISSION SOLAR BOAT, the Comprehensive Maintenance of the ZERO EMISSION SOLAR BOAT shall begin as per SOW Clause 3.2.1.7

3.2.3. Comprehensive Maintenance

- a. The Successful Bidder shall be required to undertake Scheduled Maintenance, Corrective Maintenance, and Breakdown Maintenance during the CMC Period.
- b. The Successful Bidder shall adhere to all maintenance procedures as required by OREDA from time to time, without any protest or hesitation.

- c. The Successful Bidder shall undertake the Scheduled Maintenance of each Project as per the standard maintenance protocol given in SOW Clause 3.3.1.8. The Scheduled Maintenance process shall be documented step-by-step as per the instructions given in the ReSolve Mobile App developed by OREDA through CRC.
- d. The Successful Bidder shall also undertake Corrective Maintenance and Breakdown Maintenance as and when required upon receipt of service request from CRC or OREDA or Department raised through ReSolve Mobile App or any other medium as suggested by OREDA or Department from time to time. Such service request shall be resolved and made functional within a maximum period of seven (7) Days from the date of such service request raised through ReSolve Mobile App, failing which might restrict the Successful Bidder in participating in the future opportunities of OREDA, subject to the final decision at the discretion of OREDA only.
- e. The Successful Bidder is required to train at least two (2) designated persons from the Department for day-to-day Comprehensive Maintenance and upkeep of the zero emission solar boat.
- f. The Successful Bidder shall maintain all the Spares as given in SOW Clause 3.3.1.3 and shall ensure to maintain the safety stock all the time until the expiry of the Work Order, prior to which the Successful Bidder shall handover all the Spares in full to OREDA.

3.2.4.Inspection by OREDA/ Owner

- a) OREDA/ the Owner shall be responsible for providing its approval on the final Designs and Drawings consisting of the detailed designs, single line diagram, etc. after the obtaining such document from the Successful Bidder pursuant to SOW Clause 3.2.1.1 g) and 3.2.2.1 f)
- b) The manufacturer/bidder shall afford the representatives of OREDA/ Owner all the reasonable facilities for inspecting and testing the materials, machineries and workmanship used or intended to be used for the construction and equipment of the zero emission solar boats and for the attendance of the Owner/ OREDA authorised representative at the trials of the zero emission solar boat and supply free of charge such apparatus materials, tools or labour as may be required for such inspection and testing. Notwithstanding the inspection carried out by the Owner / OREDA at the manufacturer/bidder's premises or at the Shipyard before delivery, the Owner's right to inspection and rejection of the zero emission solar boat at delivery place shall not be prejudiced in any way in case of non-conformity with the specification prescribed therein.
- c) If the testing and inspections facility can be made available at delivery site, the manufacturer/bidder shall intimate OREDA/ Owner about the same. In such case, all tests and inspections shall be made at the Project site. The Authorized Representative of OREDA/ Owner shall be entitled at all reasonable times to inspect, supervise and test during the implementation of the Project. Such inspection will not relieve the Successful Bidder of their obligation in the Work Order.
- d) Owner shall also have the right to have the tests carried out at its own cost by an independent agency at any point in time and flag for any deviation to the manufacturer/ bidder about the same. The manufacturer/ bidder needs to rectify the same for the acceptance of the final delivery by the Owner/ OREDA
- e) The manufacturer/bidder shall provide appropriate training to the personnel of the Owner in various operational aspects of the zero emission solar boats at his own cost. The contract price shall include the cost of all such training facilities and also shall cover travel cost, local accommodation, transport and incidental expenses etc.

3.2.5. Progress Report

- a) The manufacturer/bidder shall intimate the progress reports to the Owner/ OREDA in such form as to compare readily the actual rate of all work on the zero emission solar boat, its machinery and to indicate the steps taken to avoid delay in completion, if at any time the actual state of progress in any respect is in arrear of the approved programme of construction.
- b) The manufacturer/bidder shall at its own cost carry out all trials mentioned in the approved specification and drawings or which may be, in the opinion of the Owner/ OREDA, necessary to test the zero emission solar boats or their machinery and equipment or the materials or work supplied or carried out in their construction and shall ensure that adequate notice is given to carry out any such test or trial and shall make adequate provision for the presence of these tests or trials of the Owner/ OREDA or its representative, and shall subsequently to the trials and before the zero emission solar boat is accepted as completed by the Owner/ OREDA, make good all defects, if any, which may have developed at any time before.

- c) As soon as the Manufacturer/bidder shall have received from the Engineer-in-charge his certificates covering the satisfactory completion, the manufacturer/bidder shall fit the zero emission solar boat for delivery to the destination given in the contract and shall deliver the zero emission solar boat or cause the same to be delivered in a proper and sea man like manner to the Owner/ Engineer-in-charge at the desired places, in such place and position as may be indicated by him with all necessary certificates and licenses and in a good, complete and satisfactory condition or repair the wear and tear consequent upon the voyage expected and with all stores and equipment in the specification mentioned or herein provided for on board. Any damage incurred or defects disclosed during the voyage are to be made good by the manufacturer/bidder at his own expenses. A sufficient crew and all engineering and other necessary and usual stores and equipment and charges of every description including dock, canal and harbour dues, during the voyage are to be borne by the Manufacturer/bidder.
- d) OREDA reserves the right prior to the award of the contract to send a team of persons to visit and inspect the shipyard of the best responsive tenderer to ascertain the capability if they wish so.
- e) After the zero emission solar boat completion date as provided in the tender document / Agreement, the manufacturer/bidder shall deliver the zero emission solar boat at desired place and conduct acceptance trials to the satisfaction of the Owner/ OREDA.
- f) Upon the Owner/ OREDA being satisfied as to the delivery of the zero emission solar boat duly completed and equipped and with all defects made good, the zero emission solar boat shall undergo acceptance trials at the desired place to ensure the satisfactory performance of the zero emission solar boat as per the stipulated specification and shall be accepted by the Owner whose representative shall there upon send to the manufacturer/bidder a certificate to the effect and this certificate alone shall be the evidence of the acceptance of the zero emission solar boat by the Owner.
- g) The manufacturer/bidder shall provide fuel, oil, lubricating oil, grease or other like consumable store in sufficient quantities on board the zero emission solar boat for voyage and acceptance trials at desired places as indicated earlier at his own cost.
- h) Manufacturer/Bidder supply all the fast moving spares required for one year for maintenance of craft along with list.

3.3. Technical details of Project

3.3.1.Technical details of zero emission solar boat

- a) Technical Specifications: The Technical Specification of all Equipment are provided in Annexure 7.5.1
- b) **Designs and Drawings**: The Designs and Drawings of the Project are provided in Annexure 7.5.2,
- c) **Spares**: The Spares of the Project are provided in Annexure 7.5.3.
- d) **Commissioning Report**: The detailed Commissioning procedure is provided in Annexure 7.5.4.
- e) **Joint Commissioning Certificate**: The format of the Joint Commissioning Certificate is provided in Annexure 7.5.5.
- f) Acceptance Certificate: The format of the Acceptance Certificate is provided in Annexure 7.5.6.
- g) **CRC guidelines**: The CRC guidelines are provided in Annexure 7.8.
- h) **Scheduled Maintenance**: The detailed procedure and checklist for performing Scheduled Maintenance are provided in Annexure 7.5.7.

3.4. Project Timelines

3.4.1. The following are the Project Timelines for developing the Project:

Activities	Project Timelines
Issue of Letter of Intent by OREDA	Т0
Response to Letter of Intent by the Successful Bidder	T1 = T0 + fifteen (15) Days
Issue of Work Order by OREDA	T2 = T1+ seven (7) Days

Deployment	For newzero emission solar boat: T3 = T2 + One hundred and fifty (150) Days For retrofit boat: T3 = T2+ number of boats * 1 day
Acceptance	T4 = T3 + thirty (30) Days for new zero emission solar boats
CMC start date	T5 = T3 + one (1) Days
CMC end date	T6 = T5 + two (2) Years

T0: start date

3.5. Acceptance of Specification & Drawings

3.5.1. The approved specification and drawings shall be accepted by the Manufacturer/ bidder as sufficient for the due performance of this contract to the satisfaction of the OREDA/ Owner. Accordingly, the manufacturer/ bidder shall design and construct the boats, supply all materials, and carry out all works necessary for the purpose notwithstanding that any such material or work may not be expressly mentioned or described in the approved specification and drawings and the manufacturer/bidder shall not be entitled to any additional payments thereof beyond the contract price except only for such extras and alternations as may have been ordered in writing by the Owner/ OREDA/Engineer-in-Charge as provided in Clause 3.6.

3.6. Extras and Alternations

- 3.6.1. The manufacturer/bidder shall execute and complete the work under the contract all such works and supply all such materials and fittings as, from time to time, may be ordered in writing by OREDA/ the Owner in addition to or in substitution for the work materials and fittings specified in the approved specification and drawings.
- 3.6.2. The Owner shall pay for any such extra or alternation as may have been ordered in writing as aforesaid, such sum as may be agreed in writing by the Owner and the manufacturer/bidder. If any such alternation shall result in a reduction of cost to the Manufacturer/Bidder
- 3.6.3. The Owner/ OREDA shall have the authority to deduct such amount from the contract price, accordingly the amount of such statement to be fixed by the agreement.
- 3.6.4. If so required by the Owner/ OREDA, the manufacturer/bidder shall keep a separate account of the actual expenditure on work and materials in respect of any extra or alternation ordered as aforesaid and shall produce such account for inspection by the Owner/ Engineer-in-Charge and such other information as evidence as to such expenditure as the owner may reasonably request.
- 3.6.5. The Owner/ OREDA has absolute right to inspect at the site at any time without prior notice to the manufacturer/bidder. He may suggest/give valuable guidance for improvement in the quality of work either by himself or through his representative and consultants.

3.7. Ownership of Boats

3.7.1. The zero emission zero emission solar boats together with all machineries, equipment and other things agreed to be made or supplied for the zero emission solar boats and all materials brought on the zero emission solar boat or on the manufacturer/bidder's premises for the performance of the contract shall remain at the sole risk of the manufacturer/bidder until the boats are accepted by the Owner/OREDA.

4. Qualification Requirement (QR)

The Bidder shall fulfil the below Qualification Requirement in order to submit the Bid. Any discrepancy or deviation from the stated Qualification Requirement shall make the Bidder ineligible to submit the Bid and such Bid shall be liable for rejection.

4.1. General Qualification Requirement

4.1.1.	Applicability:	The Bidder must submit a copy of the relevant documents issued by
	The Bidder must be a	an appropriate Government authority in India.
	4.1.1.1. company registered under The Indian Companies Act, 1956/ 2013; or 4.1.1.2. partnership firm registered under The Indian Partnership Act, 1932; or	The Bidder must submit Bid Form 12.
	4.1.1.3. sole proprietorship firm under the relevant laws in India.4.1.1.4. Joint venture of companies registered in India under relevant laws in India	Refer Form 7.9 for JV format
	Note:consortium and subcontracting are not allowed.	
4.1.2.	Applicability:	The Bidder shall submit a self-certification by an authorized
	The Bidder must not be debarred/ blacklisted/ defaulted by any Government, agency, Public Sector	person duly notarized to this effect.
	Undertaking (PSU), institution/ autonomous organizations in the past.	The Bidder must submit Bid Form 9.

4.2. Specific Qualification Requirement

The Bidder must be in possession of the valid test certificates of boats, solar photovoltaic modules, inverters, batteries from MNRE/ BIS/ NABL/ IACS/IWT authorized test laboratories only. Such test certificates must have the IEC and IP standards from any valid MNRE / IACS accredited test labs as given in Appendix Form 8 of Appendix Clause 7.5.8 and Appendix Form 8 of Appendix Clause 7.6.8. Such test certificates must have the IEC and IP standards from any valid MNRE / IACS accredited test labs as given in Appendix Form 8 of Appendix Clause 7.6.8. The Bidder must submit Bid Form 8 of Section 7 (Annexure). Note: The proof of all documents showcasing the possession of such copies of the Test Certificates by the Bidder shall be submitted as per the instructions	Clause no.	Qualification Requirement	Support document
and not at the time of bidding.		Applicability: The Bidder must be in possession of the valid test certificates of boats, solar photovoltaic modules, inverters, batteries from MNRE/ BIS/ NABL/ IACS/IWT authorized test laboratories only. Such test certificates must have the IEC and IP standards from any valid MNRE / IACS accredited test labs as given in Appendix Form 8 of Appendix Clause 7.5.8 and Appendix Form 8 of Appendix	The Bidder must declare that it will possess the test reports and data sheets in the name of OEM only along with the authorization letter from Original Equipment Manufacturer (OEM). The test reports and datasheets for Equipment must be submitted in the name of a single OEM only. However, the change of OEM is permissible during work on assigning sufficient reason for the same and submission of the latest datasheets and test reports from MNRE approved labs. The Bidder must submit Bid Form 8 of Section 7 (Annexure). Note: The proof of all documents showcasing the possession of such copies of the Test Certificates by the Bidder shall be submitted as per the instructions given under the Letter of Intent

4.2.2.	Applicability: The Bidder must have established high quality, environment management system, and information security standards in place and must have ISO 9001 and ISO 14001 certifications and IEC for solar photovoltaic modules, inverters, batteries, electric motorsand relevant test certificates for the boat	The Bidder shall declare that it has a copy of the ISO certificate for ISO 9001 and will possess a copy of the ISO 14001 certificate in the name of the Original Equipment Manufacturer (OEM), Supported by a letter of authorization from the OEM. The Bidder must submit Bid Form
		Note: The documentary evidence shall be submitted as a part of the response to the Letter of Intent and prior to issuance of the Work Order, and not at the time of bidding.

4.3. Technical Qualification Requirement

Clause no.	Qualification Requirement	Support document
4.3.1.	Applicability: The Bidder must have the experience of design and deployment of 3 nos. of Zero emission solar boats during the last five (5) years from the last date of online submission of the Technical Bid in India	The Bidder shall submit the letter of awards/ work orders/ contract agreement along with the Joint Commissioning Certificate issued by Implementing entity. The Bidder must submit Bid Form 6 of Section 7 (Annexure). Note: a) The letter of awards/ work orders/ contract agreement along with any amendments issued shall be submitted in full without deleting/ hiding any information. The Bidder must submit Bid Form 6 of Section 7 (Annexure).

4.3.2. Applicability:

The Bidder must have a good track record of maintenance of the zero emission solar boats for 2 years.

To establish such functionality rate, the bidder must submit relevant information in the given format at 7.10.

The Bidder shall submit the letter of awards/ work orders/ contract agreement along with the experience certificate /Joint Commissioning Certificate issued by Government, PSUs, Government Agencies/ Bodies or any other establishment registered under the Society Registration Act, 1860 or The Indian Trust Act, 1882.

Note:

- a) The letter of awards/ work orders/ contract agreement along with any amendments issued shall be submitted in full without deleting/ hiding any information.
- b) The experience certificate/joint commissioning certificate shall clearly mention the capacity and the date of The commissioning. Joint Commissioning Certificate issued by concerned government authority as per the Prudent Utility Practices followed in India. The performance certificate should specify successful running period of the boat and the date of certificate issued should not be before the date of this RFP.
- c) The document proof and photographs (Work order, Completion certificate under class, Photographs ofoperational zero emission solar boat, etc) of the zero emission solar boats

The bidder must submit a self-declaration against this along with the detailed of the project installed and maintained for minimum 5 years.

4.4. Financial Qualification Requirement

Clause no.	Qualification Requirement	Support document
4.4.1.	Applicability: The Bidder must have minimum average annual turnover of not less than Rs. 1.5 Cr. values provided in any of the 3 years of the last five (5) financial years from FY 18-19, FY19-20, FY20-21, FY 21-22 and FY 22-23 (excluding Other incomes).	The Bidder shall submit a turnover certificate issued by a chartered accountant, as per Bid Form 7 of Section 7 (Annexure). It is important to note that the annual turnover for each financial year shall be the income/ earning/ revenue from the main business only; and other income (if any) shall not be considered for evaluation.

5. General Conditions of Contract (GCC)

5.1. General

5.1.1. Work Order

- 5.1.1.1. All documents forming part of the Work Order including any Amendment to the Work Order as per GCC Clause 5.1.2, and all parts thereof, are intended to be correlative, complementary, and mutually explanatory.
- 5.1.1.2. The Work Order constitutes all the terms and conditions for the Successful Bidder with respect to the Commissioning, and Acceptance of the Project along with its CMC Period. The CMC shall be executed between OREDA and the Successful Bidder as per the sample format provided in Annexure Clause 7.3.3.
- 5.1.1.3. The Work Order including any Amendment supersedes all communications, negotiations, and agreements (whether written or oral) made prior to the date of issuance of Work Order in case of any confusion with the Bidding Document at any point in time.
- 5.1.1.4. The Work Order shall be read as a whole.

5.1.2. Amendment

5.1.2.1. No Amendment to the Work Order shall be made effective unless it is in writing, is dated, expressly refers to the Work Order, and is signed duly and issued by OREDA based on any amended terms mutually agreed between OREDA and the Successful Bidder or as it is required in the interest of the Project.

5.1.3. Independent Successful Bidder

5.1.3.1. The Successful Bidder shall be completely independent in performing all its obligations under the Work Order. The Work Order does not create any agency, partnership, joint venture, or other joint relationship with OREDA. Subject to the provisions of the Work Order, the Successful Bidder shall be solely responsible for the manner in which all the obligations will be performed. All employees and representatives engaged by the Successful Bidder in connection with the performance of the Work Order shall be under the complete control of the Successful Bidder only and shall not be deemed to be employees of OREDA at any point in time, and nothing contained in the Work Order or in any subcontract awarded by the Successful Bidder to anyone shall be construed to create any contractual relationship between OREDA and any such employees, representatives, engaged by the Successful Bidder.

5.1.4. Non-waiver

5.1.4.1. Any waiver of Successful Bidder's rights, powers, or remedies under the Work Order must be in writing, must be dated and signed duly and issued by OREDA in granting such waiver, and must specify the right and the extent to which it is being waived.

5.1.5. Severability

5.1.5.1. If any provision or condition of the Work Order is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Work Order.

5.1.6. Communications

- 5.1.6.1. Wherever these conditions provide for issuing approvals, certificates, consents, determinations, notices, requests, and discharges, these communications shall be:
- a) in writing along with a copy being sent to the other Party and delivered against its receipt; and
- b) Delivered, sent, or transmitted to the address of either Party, as stated in Work Order.

5.1.7. Law

5.1.7.1. The Work Order shall be governed by and interpreted in accordance with the laws of India.

5.1.8. Language

5.1.8.1. The ruling language of the Work Order shall be in English only.

5.1.9. Integrity Violation

- 5.1.9.1. The Successful Bidder shall observe the highest standard of ethics during the performance of the Work Order.
- 5.1.9.2. Applicable as per ITB Clause 1.1.2.2

5.2. Payment

5.2.1. Capex

- 5.2.1.1. The Capex shall be as specified in the Work Order.
- 5.2.1.2. Unless an escalation clause is provided in GCC Clause 5.2.2, the Capex shall be a bidder lump sum amount, non-escalating, and not subject to any alteration, except in the event of a Change Order for the Project issued by OREDA.
- 5.2.1.3. Subject to SOW Clause 3.2.2, the Successful Bidder shall be deemed to have satisfied itself as to the correctness and sufficiency of the Capex, which shall, except as otherwise provided for in the Work Order, cover all its obligations under the Work Order.

5.2.2. Terms of Payment

- 5.2.2.1. The terms of payment outlining the procedures to be followed are mentioned in Section 6 (SCC).
- 5.2.2.2. No payment made by OREDA herein shall be deemed to constitute acceptance by OREDA of the Project or any part(s) thereof, until the issuance of Acceptance Certificate by OREDA in writing.
- 5.2.2.3. The payment against the undisputed invoice shall be made by OREDA based on the internal processes.
- 5.2.2.4. The currency in which payments are made to the Successful Bidder under this Work Order shall be in Indian Rupees only.

5.2.3. Taxes

- 5.2.3.1. The Tax on the Capex shall be paid as per the prevailing rules in India at the time of invoicing.
- 5.2.3.2. The Tax Deduction at Source (TDS) shall be deducted as per the prevailing rules in India at the time of the payment.

5.2.4. Performance Security

- 5.2.4.1. The Successful Bidder shall submit the Performance Security as per ITB Clause 1.6.3.
- 5.2.4.2. In case of any forfeiture, in full or parts, made on the Performance Security, the Successful Bidder shall be liable to replenish the Performance Security to its original amount within a maximum time period of seven (7) Days from the aforesaid date of such forfeiture in full or parts. In case the Successful Bidder fails to do the aforesaid replenishment within the prescribed timelines then the Work Order shall be cancelled, and OREDA may take suitable action against the Successful Bidder.
- 5.2.4.3. In case the Performance Security requires any extension of the expiry date and/ or claim date, the same shall be extended suitably by the Successful Bidder as per the instructions of OREDA.
- 5.2.4.4. The Performance Security shall be returned to the Successful Bidder within thirty (30) Days after its expiration, pursuant to GCC Clause 5.2.4.1.

5.2.5. Incoterms

5.2.5.1. Unless inconsistent with any provision of the Work Order, the meaning of any trade term and the rights and obligations of Parties thereunder shall be as prescribed by Incoterms.

5.3. Intellectual Property

5.3.1. License/ Use of Technical Information

- 5.3.1.1. For the Commissioning until Acceptance of the Project and during the CMC Period, the Successful Bidder hereby grants a non-exclusive and non-transferable license (without the right to sub-license) to OREDA under the patents, utility models or other industrial property rights owned by the Successful Bidder or by a third party from whom the Successful Bidder has received the right to grant licenses thereunder, and shall also grant to OREDA a nonexclusive and non-transferable right (without the right to sub-license) to use the know-how and other technical information disclosed to OREDA under the Work Order. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, know-how, or other intellectual property rights from the Successful Bidder or any third party to OREDA.
- 5.3.1.2. The copyright in all drawings, documents and other materials containing data and information furnished to OREDA by the Successful Bidder herein shall remain vested in the Successful Bidder or, if they are furnished to OREDA directly or through the Successful Bidder by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

5.3.2. Confidential Information

- 5.3.2.1. The Parties shall keep confidential and shall not, without the written consent of the other Party, divulge to any third party any documents, data or other information furnished directly or indirectly by the other Party hereto, whether such information has been furnished prior to, during or following termination of the Work Order. Notwithstanding the above, a Party may furnish to its third parties such documents, data and other information it receives from the other Party to the extent required for the third parties to perform all the obligations under the Work Order, in which event the Party shall obtain from such third parties an undertaking of confidentiality similar to that imposed on the Party under this GCC Clause 5.3.2 and submit a copy of the same to the other Party with an immediate effect.
- 5.3.2.2. A Party shall not use such documents, data, and other information received from the other Party for any purpose other than for this Project and services as are required for the performance of the Work Order.
- 5.3.2.3. The obligation of a Party under GCC Clauses 5.3.2.1 and 5.3.2.2 above, however, shall not apply to that information which
 - 1. now or hereafter enters the public domain through no fault of that Party;
 - 2. can be proven to have been possessed by that Party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other Party hereto; and
 - 3. otherwise lawfully becomes available to that Party from a third party that has no obligation of confidentiality.
- 5.3.2.4. The above provisions of this GCC Clause 5.3.2 shall not in any way modify any undertaking of confidentiality given by either of the Parties hereto prior to the date of the Work Order in respect of the Project or any part thereof.
- 5.3.2.5. The provisions of this GCC Clause 5.3.2 shall survive termination, for whatever reason, of the Work Order.

5.4. Execution of the Project

5.4.1. Representatives

5.4.1.1. Authorized Representative of OREDA

- a) The name of the Authorized Representative of OREDA shall be generally mentioned in the Work Order. If the Authorized Representative of OREDA is not named in the Work Order, then within seven (7) Days of the Effective Date, OREDA shall appoint and notify the Successful Bidder in selecting an Authorized Representative of OREDA. OREDA may from time to time appoint some other person as the Authorized Representative of OREDA as deemed necessary in place of the person previously so appointed and shall give notice of the name of such other person as Authorized Representative of OREDA to the Successful Bidder as required. Such an appointment shall only take effect upon the date of issuance of such notice by OREDA. The Authorized Representative of OREDA shall represent and act for OREDA at all times during the performance of the Work Order. All notices, instructions, orders, certificates, approvals and all other communications under the Work Order shall be given by the Authorized Representative of OREDA, except as herein otherwise provided.
- b) All notices, instructions, information, and other communications given by the Successful Bidder to OREDA under the Work Order shall be given to the Authorized Representative of OREDA, except as herein otherwise provided.

5.4.1.2. Project Manager, Construction Manager, and CMC Manager

- a) The name of the Project Manager representing the Successful Bidder shall be generally mentioned in the Work Order. If the Successful Bidder's representative as Project Manager is not named in the Work Order, then within seven (7) Days of the Effective Date, the Successful Bidder shall appoint the Project Manager and shall request OREDA in writing to approve the Project Manager so appointed. If OREDA makes no objection to the appointment within seven (7) Days, the Project Manager shall be deemed to have been approved. If OREDA objects to the appointment within seven (7) Days, then the Successful Bidder shall appoint a replacement within seven (7) Days of such objection, and the foregoing provisions of this GCC Clause 5.4.1.2 a) shall apply thereto.
- b) The Project Manager shall represent and act for the Successful Bidder at all times during the performance of the Work Order and shall give to the Authorized Representative of OREDA all the Successful Bidder's notices, instructions, information, and all other communications under the Work Order.
- c) All notices, instructions, information, and all other communications given by OREDA or the Authorized Representative of OREDA to the Successful Bidder under the Work Order shall be given to the Project Manager or, in its absence, its deputy, except as herein otherwise provided.
- d) The Successful Bidder shall not revoke the appointment of the Project Manager without OREDA's prior written consent. If OREDA consents thereto, the Successful Bidder shall appoint some other person as the Project Manager, pursuant to the procedure set out in GCC Clause 5.4.1.2 a).
- e) The Project Manager may, subject to the written approval of OREDA, at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time; however, any such delegation or revocation shall be subject to a prior notice signed by the Project Manager and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Authorized Representative of OREDA.
- f) Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Clause 5.4.1.2 c) shall be deemed to be an act or exercise by the Project Manager.
- g) From the commencement of works of the Project at the site until installation, Commissioning and Acceptance, the Project Manager shall additionally appoint a suitable person as the Construction Manager. The Construction Manager shall supervise all work done at the site by the Successful Bidder and shall be present at the site as required during the performance of the Work Order in accordance with the terms of the Work Order. Whenever the Construction Manager is absent from the site, the Project Manager shall appoint a suitable person to act as the Construction Manager's deputy with prior notice of seven (7) Days before such a replacement and shall inform OREDA in writing prior to such changes.
- h) From the commencement of the CMC Period until its expiry, the Project Manager shall appoint a suitable person as the CMC Manager. The CMC Manager shall supervise all work done at the site by the Successful Bidder and shall be present at the site as required during the performance of the Work Order in accordance with the terms of the Work Order. Whenever the CMC Manager is absent from the site, the Project Manager shall appoint a suitable person to act as the CMC Manager's deputy with

prior notice of seven (7) Days before such a replacement and shall inform OREDA in writing prior to such changes.

- i) OREDA may by notice to the Successful Bidder object to any representative or person employed by the Successful Bidder in the execution of the Work Order who, in the reasonable opinion of OREDA, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the site regulations. OREDA shall provide writing of the same, whereupon the Successful Bidder shall remove such person from the Project with an immediate effect.
- j) If any representative or person employed by the Successful Bidder is removed in accordance with GCC Clause 5.4.1.2 g), the Successful Bidder shall, where required, promptly appoint a replacement; failure to which will lead to a material breach in the Work Order.

5.4.2. Work program

5.4.2.1. Successful Bidder's Organization

Within Fifteen (15) Days from the Effective Date, the Successful Bidder shall submit to OREDA an organization chart showing the proposed team to be established by the Successful Bidder for carrying out work on the Project within the Project Timelines for achieving Commissioning and Acceptance as mentioned in SOW Clause 3.4. The organization chart shall include the identities of the key personnel and the short curricula vitae of such key personnel to be employed. The Successful Bidder shall promptly inform the Authorized Representative of OREDA in writing of any revision or alteration of such an organization chart, as applicable.

5.4.2.2. Detailed Workplan

Within fifteen (15) Days from the Effective Date, the Successful Bidder shall submit to the Authorized Representative of OREDA a Detailed Workplan, made in a form acceptable to the Authorized Representative of OREDA and showing the sequence in which, it proposes to achieve the Commissioning and Acceptance in line with the Project Timelines.

The Successful Bidder shall update the actual achievement against the Detailed Workplan as and when appropriate or when required by the Authorized Representative of OREDA, but without modification in the Project Timelines and any extension granted in accordance with GCC Clause 5.7.2 and shall submit all such revisions to the Authorized Representative of OREDA.

5.4.2.3. Progress of Detailed Workplan

If at any time the Successful Bidder's actual progress falls behind the Detailed Workplan, or it becomes apparent that it will so fall behind, the Successful Bidder shall promptly prepare and submit to the Authorized Representative of OREDA a revised Detailed Workplan without changing any timelines with reference to the Project Timelines, taking into account the prevailing circumstances, and shall notify the Authorized Representative of OREDA of the steps being taken to expedite progress so as to achieve the Commissioning and Acceptance of the Project within the Project Timelines, any extension thereof entitled under GCC Clause 5.7.2, or any extended period as may otherwise be notified by OREDA.

5.5. Guarantees and Liabilities

5.5.1. Delay Liquidated Damages

- 5.5.1.1. The Successful Bidder guarantees that it shall achieve the Commissioning of the Project as per the Project Timelines or any extension thereof entitled under GCC Clause 5.7.2.
 - 5.5.1.2. In case of failure on the part of the Successful Bidder to achieve the Commissioning timelines pursuant to GCC Clause 5.5.1.1, the Successful Bidder shall pay to OREDA a Delay Liquidated Damage for a sum equivalent to one percent (1%) of the Capex for each week of the delay from the target date of Commissioning, to be calculated on pro-rata basis for each Day of delay, subject to a maximum of five percent (10%) of the Capex.
 - 5.5.1.3. Once the maximum limit of five (10%) is reached, OREDA may consider terminating the Work Order and forfeit the Performance Security without prejudice to the other remedies of the Work Order. However, the Chief Executive, OREDA may at own discretion allow reasonable time extension upon the written application of the Successful Bidder. If the delay is considered intentional or due to the negligence of the Successful Bidder, no extension can be allowed with the imposition of Delay Liquidated Damages. If the delay is considered to be genuine,

- then a suitable time extension can be allowed with/ without the imposition of the delay Liquidated Damages, to be evaluated on a case-to-case basis.
- 5.5.1.4. The payment of liquidated damages shall not in any way relieve the Successful Bidder from any of its obligations to complete the Project or from any other obligations and liabilities of the Successful Bidder under the Work Order.
- 5.5.1.5. The Delay Liquidated Damages shall be inclusive of all applicable taxes as applicable under the laws of India and such applicable taxes shall be borne by the Successful Bidder only.
- 5.5.1.6. The Successful Bidder acknowledges that the Delay Liquidated Damages payable by the Successful Bidder under this Work Order are a genuine pre-estimate of the losses suffered by OREDA and the compensation as contemplated is reasonable and not by way of any penalty.

5.5.2. Warranty

5.5.2.1. The details of the provisions related to the Warranty of the Equipment under the Project are mentioned in Section 6 (SCC).

5.5.3. Defect Liability

- 5.5.3.1. The Successful Bidder warrants that the Project or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Project supplied and of the work executed.
- 5.5.3.2. The Defect Liability Period shall be five (5) Years from the date of Acceptance of the Project.
- 5.5.3.3. If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Project supplied or of the work executed by the Successful Bidder, the Successful Bidder shall promptly, in consultation and agreement with OREDA regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good such defect as well as any damage to the Project caused by such defect.
- 5.5.3.4. OREDA shall give the Successful Bidder a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. OREDA shall afford all reasonable opportunities for the Successful Bidder to inspect any such defect.
- 5.5.3.5. The Successful Bidder may, with the consent of OREDA, remove from the site any Project or any part of the Project that are defective if the nature of the defect, and/or any damage to the Project caused by the defect, is such that repairs cannot be expeditiously carried out at the site.
- 5.5.3.6. If the repair, replacement or making good is of such a character that it may affect the efficiency of the Project or any part thereof, OREDA may give to the Successful Bidder a notice requiring that tests of the defective part of the Project shall be made by the Successful Bidder immediately upon completion of such remedial work, whereupon the Successful Bidder shall carry out such tests.
 - If such part fails the tests, the Successful Bidder shall carry out further repair, replacement or making good, as the case may be, until that part of the Project passes such tests. The tests shall be agreed upon by OREDA and the Successful Bidder.
- 5.5.3.7. If the Successful Bidder fails to commence the work necessary to remedy such defect or any damage to the Project caused by such defect within a reasonable time (which shall in no event be considered to be less than seven (7) Days), OREDA may, following notice to the Successful Bidder, proceed to do such work through a third party, and the reasonable costs incurred by OREDA in connection therewith shall be paid to OREDA by the Successful Bidder or may be deducted by OREDA from any monies due to the Successful Bidder or claimed under the Performance Security.
- 5.5.3.8. If the Project or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Project or such part, as the case may be, shall be extended by a period equal to the period during which the Project or such part cannot be used by OREDA because of any of the aforesaid reasons.
- 5.5.3.9. Except as provided in GCC Clauses 5.5.2 and GCC Clause 5.6.3, the Successful Bidder shall be under no liability whatsoever and howsoever arising, and whether under the Work Order or at law, in respect of defects in the Project or any part thereof, the design or engineering or work executed that appear after Acceptance of the Project or any part thereof, except where

such defects are the result of the gross negligence, fraud, criminal or willful action of the Successful Bidder.

5.5.4. Patent Indemnity

5.5.4.1. The Successful Bidder shall, subject to OREDA's compliance with GCC Clause 5.5.4.2, indemnify and hold harmless OREDA and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which OREDA may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Work Order by reason of Commissioning and Acceptance of the Project.

Such indemnity shall not cover any use of the Project or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Work Order, any infringement resulting from the use of the Project or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Successful Bidder, pursuant to the Work Order.

5.5.4.2. If any proceedings are brought or any claim is made against OREDA arising out of the matters referred to in GCC Clause 5.5.4.1, OREDA shall promptly give the Successful Bidder a notice thereof, and the Successful Bidder may at its own expense and in OREDA's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Successful Bidder fails to notify OREDA within seven (7) Days after receipt of such notice that it intends to conduct any such proceedings or claim, then OREDA shall be free to conduct the same on its own behalf. Unless the Successful Bidder has so failed to notify OREDA within the seven (7) Day period, OREDA shall make no admission that may be prejudicial to the defence of any such proceedings or claim.

OREDA shall, at the Successful Bidder's request, afford all available assistance to the Successful Bidder in conducting such proceedings or claim, and shall be reimbursed by the Successful Bidder for all reasonable expenses incurred in so doing or may be deducted by OREDA from any monies due to the Successful Bidder or claimed under the Performance Security.

5.5.5. Limitation of Liability

- 5.5.5.1. Except in cases of criminal negligence or wilful misconduct,
- the Successful Bidder shall not be liable to OREDA, whether in contract, tort, or otherwise, for any indirect
 or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided
 that this exclusion shall not apply to any obligation of the Successful Bidder to pay the Delay Liquidated
 Damages to OREDA; and
- 2. the maximum liability of the Successful Bidder to OREDA, whether under the Work Order, in tort or otherwise, shall not exceed twenty four percent (24%) of the Capex.

5.6. Risk Distribution

5.6.1. Transfer of Ownership

- 5.6.1.1. The ownership of the Project shall pass on to OREDA on fulfilment of the following:
- 1. Issuance of a certificate by the Successful Bidder stating that the Successful Bidder is free and clear from any and all claims, liens, security interest, encumbrances, unpaid vendors'/ suppliers' lien or otherwise, arising out of or in connection to the performance of the Work Order as per Annexure Clause 7.8; and
- 2. Issuance of Acceptance Certificate by OREDA.

5.6.2. Risk

Notwithstanding anything to the contrary in this Contract, the care, custody and the risk in relation to the entire Project shall pass on to OREDA on fulfilment of the following:

- 1. Issuance of Acceptance Certificate by OREDA; and
- 2. Issuance of release and waiver of lien-free certificate by the Successful Bidder.

5.6.3. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification

- 5.6.3.1. The Successful Bidder shall indemnify and hold harmless OREDA and its employees, officers and advisors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Project, arising in connection with the implementation of the Project and by reason of the negligence of the Successful Bidder.
- 5.6.3.2. If any proceedings are brought or any claim is made against OREDA that might subject the Successful Bidder to liability under GCC Clause 5.6.3.1, OREDA shall promptly give the Successful Bidder a notice thereof and the Successful Bidder may at its own expense and in OREDA's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Successful Bidder fails to notify OREDA within seven (7) Days after receipt of such notice that it intends to conduct any such proceedings or claim, then OREDA shall be free to conduct the same on its own behalf. Unless the Successful Bidder has so failed to notify OREDA within the seven (7) Day period, OREDA shall make no admission that may be prejudicial to the defence of any such proceedings or claim.

OREDA shall, at the Successful Bidder's request, afford all available assistance to the Successful Bidder in conducting such proceedings or claim, and shall be reimbursed by the Successful Bidder for all reasonable expenses incurred in so doing or may be deducted by OREDA from any monies due to the Successful Bidder or claimed under the Performance Security.

5.6.4. Insurance

- 5.6.4.1. The Successful Bidder shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect until the issuance of the Acceptance Certificate, the insurances set forth below in the sums and with the deductibles and other conditions. The identity of the insurers and the form of the policies shall be subject to the approval of OREDA, who should not unreasonably withhold such approval.
 - a) Cargo Insurance During Transport: Covering loss or damage occurring while in transit from the Successful Bidder's works or stores, etc. until arrival at the Project site valid all the time starting from Effective Date until Commissioning.
 - b) Installation All Risks Insurance: Covering physical loss or damage to the Project at the Project site valid all the time starting from Effective Date until Commissioning.
 - c) Automobile Liability Insurance: Covering the use of all vehicles used by the Successful Bidder, whether or not owned by them, in connection with the execution of the Work Order valid all the time starting from Effective Date until Commissioning.
 - d) Workers' Compensation: In accordance with the statutory requirements applicable in India valid all the time starting from Effective Date until the end of the CMC Period.
- 5.6.4.2. OREDA shall be named as co-insured under all insurance policies taken out by the Successful Bidder pursuant to GCC Clause 5.6.4.1, except for the Third Party Liability, Workers' Compensation and the Successful Bidder's employees and representatives shall be named as co-insureds under all insurance policies taken out by the Successful Bidder pursuant to GCC Clause 5.6.4.1 except for the Cargo Insurance During Transport and Workers' Compensation. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Work Order shall be waived under such policies.
- 5.6.4.3. The Successful Bidder shall deliver to OREDA certificates of insurance or copies of the insurance policies as evidence that the required policies are in full force and effect.
- 5.6.4.4. If the Successful Bidder fails to take out and/or maintain in effect the insurances referred to in GCC Clause 5.6.4.1, OREDA may take out and maintain in effect any such insurances and may from time to time deduct from any amount due to the Successful Bidder under the Work Order any premium that OREDA shall have paid to the insurer, or may otherwise recover such amount from any monies due to the Successful Bidder or claimed under the Performance Security.
- 5.6.4.5. Unless otherwise provided in the Work Order, the Successful Bidder shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause

5.6.4, and all monies payable by any insurers shall be paid to the Successful Bidder. OREDA shall give to the Successful Bidder all such reasonable assistance as may be required by the Successful Bidder.

5.6.5. Change in Laws and Regulations

5.6.5.1. If, after the last date of online Bid submission, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed which shall be deemed to include any change in interpretation or application by the competent authorities, that subsequently affects the costs and expenses of the Successful Bidder and/or the time for achieving the Commissioning and Acceptance along with the Work Order price shall be correspondingly increased or decreased, and/ or the Time for achieving Commissioning and Acceptance shall be reasonably adjusted to the extent that the Successful Bidder has thereby been affected in the performance of any of its obligations under the Work Order. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable.

5.6.6. Force Majeure

- 5.6.6.1. "Force Majeure" shall mean any event beyond the reasonable control of OREDA or of the Successful Bidder, as the case may be, and which is unavoidable notwithstanding the reasonable care of the Party affected, and shall include, without limitation, the following:
 - a) war, hostilities or warlike operations whether a state of war be declared or not, invasion, an act of foreign enemy and civil war;
 - b) rebellion, revolution, insurrection, mutiny, usurpation of a civil or military government, conspiracy, riot, civil commotion and terrorist acts;
 - c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority;
 - d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, pandemics, lockdowns, quarantine and plague;
 - e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disasters; and
 - f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.
- 5.6.6.2. If either party is prevented, hindered or delayed from or in performing any of its obligations under the Work Order by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within seven (7) Days after the occurrence of such event.
- 5.6.6.3. The Party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Work Order for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GCC Clause 5.7.2.
- 5.6.6.4. The Party or Parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Work Order and to fulfill its or their obligations under the Work Order, but without prejudice to either party's right to terminate the Work Order under GCC Clause 5.6.6.6.
- 5.6.6.5. No delay or non-performance by either party hereto caused by the occurrence of any event of Force Majeure shall
 - a) constitute a default or breach of the Work Order, or

if and to the extent that such delay or non-performance is caused by the occurrence of an event of Force Majeure.

- 5.6.6.6. If the performance of the Work Order is substantially prevented, hindered or delayed for a single period of more than sixty (60) Days or an aggregate period of more than one hundred and twenty (120) Days on account of one or more events of Force Majeure during the currency of the Work Order, the Parties will attempt to develop a mutually satisfactory solution, failing which either party may terminate the Work Order by giving notice to the other, but without prejudice to either party's right to terminate the Work Order.
- 5.6.6.7. In the event of termination pursuant to GCC Clause 5.6.6.6, the rights and obligations of OREDA and the Successful Bidder shall be as specified in GCC Clause 5.7.4.

5.7. Change in Work Order Elements

5.7.1. Change Order

- 5.7.1.1. A Change Order shall be issued only by OREDA. Any change made necessary because of a default by the Successful Bidder in the performance of its obligations shall not be considered a Change Order.
- 5.7.1.2. Change Orders may be initiated by OREDA at any time by the issuance of a Change Order notice to the Successful Bidder. The Successful Bidder shall not make any alteration and/ or modification of the Project unless the OREDA instructs or approves a Change Order in writing.
- 5.7.1.3. If the Owner issues a Change Order notice, the variations could in the range of ±(fifty percent) 50% of the total bidding quantum and there shall be no change in the prices as quoted by the Bidder in its Price Bid. There shall be no change in Project Timelines.

5.7.2. Extension of achieving Commissioning and Acceptance

- 5.7.2.1. The Project Timelines as specified in the SOW Clause 3.4 shall be extended if the Successful Bidder is delayed or impeded in the performance of any of its obligations under the Work Order by reason of any of the following:
 - i. any occurrence of Force Majeure as provided in GCC Clause 5.6.6,
 - ii. by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Successful Bidder, subject to the final decision of Chief Executive, OREDA.

5.7.3. Suspension

- 5.7.3.1. OREDA may request, by notice to the Successful Bidder, to order the Successful Bidder to suspend performance of any or all of its obligations under the Work Order. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasons therefor. The Successful Bidder shall thereupon suspend performance of such obligation, except those obligations necessary for the care or preservation of the Project, until ordered in writing to resume such performance by OREDA.
- 5.7.3.2. If the Successful Bidder's performance of its obligations is suspended or the rate of progress is reduced pursuant to GCC Clause 5.7.3, then the Project Timeline shall be extended in accordance with GCC Clause 5.7.2.1.
- 5.7.3.3. During the period of suspension, the Successful Bidder shall not remove from the site any Project, any part of the Project or any Successful Bidder's tools and tackles, without the prior written consent of OREDA.

5.7.4. **Termination**

5.7.4.1. Termination for OREDA's Convenience

- i. OREDA may at any time terminate the Work Order for any reason by giving the Successful Bidder a notice of termination that refers to this GCC Clause 5.7.4.1.
- ii. Upon receipt of the notice of termination as per the GCC Clause 5.7.4.1 a), the Successful Bidder shall either immediately or upon the date specified in the notice of termination
 - cease all further work, except for such work as OREDA may specify in the notice of termination for the sole purpose of protecting that part of the Project already executed, or any work required to leave the site in a clean and safe condition,

- b. terminate all subcontracts, except those to be assigned to OREDA pursuant to GCC Clause 5.7.4.1a)i(b), iii. remove all Successful Bidder's tools and tackles from the site, repatriate the Successful Bidder's and its personnel from the site, remove from the site any wreckage, rubbish and debris of any kind, and leave the whole of the site in a clean and safe condition, and
- iii. subject to the payment specified in GCC Clause 42.1.3,
 - i. deliver to OREDA the parts of the Project executed by the Successful Bidder up to the date of termination, and
 - ii. deliver to OREDA all non-proprietary drawings, specifications and other documents prepared by the Successful Bidder as on the date of termination in connection with the Project.
 - iii. In the event of termination of the Work Order under GCC Clause 5.7.4.1 a), OREDA shall pay to the Successful Bidder the following amounts:
 - b. the Work Order Price, properly attributable to the parts of the Project executed by the Successful Bidder as of the date of termination

5.7.4.2. Termination for Successful Bidder's Default

- OREDA, without prejudice to any other rights or remedies it may possess, may terminate the Work Order forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Successful Bidder, referring to this GCC Clause 5.7.4.2:
- a. if the Successful Bidder becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Successful Bidder is a corporation, a resolution is passed or order is made for its winding up, other than a voluntary liquidation for the purposes of amalgamation or reconstruction, a receiver is appointed over any part of its undertaking or assets, or if the Successful Bidder takes or suffers any other analogous action in consequence of debt
- b. if the Successful Bidder assigns or transfers the Work Order or any right or interest therein in violation of the provision of GCC Clause 5.7.5.
- c. if the Successful Bidder, in the judgment of OREDA has engaged in Integrity Violation practices, as defined in GCC Clause 5.1.9.

ii. If the Successful Bidder

- a. has abandoned or repudiated the Work Order
- b. has without valid reason failed to commence work on the Project promptly or has suspended the progress of Work Order performance for a prolonged period even after receiving a written instruction from OREDA to proceed
- c. persistently fails to execute the Work Order in accordance with the Work Order or persistently neglects to carry out its obligations under the Work Order without just cause
- d. refuses or is unable to provide sufficient materials, services or labour to execute and complete the Project in the manner specified in the Project Timelines as per SOW Clause 3.4 at rates of progress that give reasonable assurance to OREDA that the Successful Bidder can attain Commissioning and Acceptance of the Project,
 - then OREDA may, without prejudice to any other rights it may possess under the Work Order, give notice to the Successful Bidder stating the nature of the default and requiring the Successful Bidder to remedy the same. If the Successful Bidder fails to remedy or to take steps to remedy the same within fourteen (14) Days of its receipt of such notice, then OREDA may terminate the Work Order forthwith by giving a notice of termination to the Successful Bidder that refers to this GCC Clause 5.7.4.2.
- iii. Upon receipt of the notice of termination under GCC Clause 5.7.4.2, the Successful Bidder shall, either immediately or upon such date as is specified in the notice of termination,
 - cease all further work, except for such work as OREDA may specify in the notice of termination for the sole purpose of protecting that part of the Project already executed, or any work required to leave the site in a clean and safe condition,

- b. terminate all subcontracts, except those to be assigned to OREDA pursuant to GCC Clause 5.7.4.1(b),
- c. deliver to OREDA the parts of the Project executed by the Successful Bidder up to the date of termination complete in all respect, and
- d. deliver to OREDA all drawings, specifications and other documents prepared by the Successful Bidder as on the date of termination in connection with the Project.
- iv. OREDA may enter upon the site, expel the Successful Bidder, and complete the Project itself or by employing any third party. OREDA may, to the exclusion of any right of the Successful Bidder over the same, take over and use with the payment of a fair rental rate to the Successful Bidder, with all the maintenance costs to the account of OREDA and with an indemnification by OREDA for all liability including damage or injury to persons arising out of OREDA's use of such Equipment, any Successful Bidder's equipment owned by the Successful Bidder and on the site in connection with the Project for such reasonable period as OREDA considers expedient to achieve the Commissioning and Acceptance.

Upon completion of the Project or at such earlier date as OREDA thinks appropriate, OREDA shall give notice to the Successful Bidder that such Successful Bidder's equipment will be returned to the Successful Bidder at or near the site and shall return such Successful Bidder's equipment to the Successful Bidder in accordance with such notice. The Successful Bidder shall thereafter without delay and at its cost remove all Successful Bidder's tools and tackles from the site, repatriate the Successful Bidder's personnel from the site, remove from the site any wreckage, rubbish and debris of any kind, and leave the whole of the site in a clean and safe condition.

- v. Subject to GCC Clause 5.7.4.2 f), the Successful Bidder shall be entitled to be paid the Work Order price attributable to the Project executed as of the date of termination, the value of any unused or partially used Project on the site, and the costs, if any, incurred in protecting the Project and in leaving the site in a clean and safe condition pursuant to GCC Clause 5.7.4.2 c) i. Any sums due to OREDA from the Successful Bidder accruing prior to the date of termination shall be deducted from the amount to be paid to the Successful Bidder under this Work Order.
- vi. If OREDA completes the Project, the cost of completing the Project by OREDA shall be determined.

If the sum that the Successful Bidder is entitled to be paid, pursuant to GCC Clause 5.7.4.2 e), plus the reasonable costs incurred by OREDA in completing the Project, exceeds the Capex mentioned in the Work Order, the Successful Bidder shall be liable for such excess.

If such excess is greater than the sums due to the Successful Bidder under GCC Clause 5.7.4.2 e), the Successful Bidder shall pay the balance to OREDA.

OREDA and the Successful Bidder shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

- 5.7.4.3. In this GCC Clause 5.7.4, the expression "Project executed" shall include all work executed, Installation Services provided, and all Project acquired, or subject to a legally binding obligation to purchase, by the Successful Bidder and used or intended to be used for the purpose of the Project, up to and including the date of termination.
- 5.7.4.4. In this GCC Clause 5.7.4, in calculating any monies due from OREDA to the Successful Bidder, the account shall be taken of any sum previously paid by OREDA to the Successful Bidder under the Work Order.

5.7.5. Assignment

- 5.7.5.1. No Party shall, without the prior consent of the other Party, assign to any Person any benefit of or obligation under this Work Order in whole or in part. Such an assignment, if approved by the other Party, shall not relieve the assigning Party from any obligations, duty, or responsibility under this Work Order.
- 5.7.5.2. The Successful Bidder consents to the creation by OREDA of security over or assignment of its rights and obligations under this Work Order including the Performance Security provided hereunder by the Successful Bidder in favour of OREDA.

5.8. Disputes and Arbitration

5.8.1. Mutual Settlement

- 5.8.1.1. If any dispute or difference shall arise between OREDA and the Successful Bidder out of, relating to or in connection with the Work Order (including its existence, breach, termination or validity) or the performance of the Comprehensive Maintenance under the Work Order, it shall, in the first instance be referred to the Chief Executive, OREDA and the Successful Bidder's senior management. The Chief Executive, OREDA shall make every effort to amicably resolve the dispute or differences arising between the Parties and provide its written decision within a maximum time period of fifteen (15) Days of the dispute being referred to it by either Party.
- 5.8.1.2. If the Chief Executive, OREDA has given its written decision to the Parties and no claim to arbitration has been communicated to it by either Party within two (2) Days from receipt of such notice, the said decision shall become final and binding on the Parties.
- 5.8.1.3. In the event that the Chief Executive, OREDA fails to provide its decision within the above said period after being requested as aforesaid, or in the event that either OREDA or the Successful Bidder is dissatisfied with any such decision, either Party may, within fifteen (15) Days after the date on which such decision is required to be provided in accordance with GCC Clause 5.8.1.1, whether the decision is provided by the Chief Executive, OREDA during such period or not, refer the matter to the Energy Secretary to the Government of Odisha for a resolution.
- 5.8.1.4. The Energy Secretary to the Government of Odisha shall make every effort to amicably resolve the dispute or differences arising between the Parties and provide its written decision within a maximum time period of seven (7) Days of the dispute being referred to it by either Party.
- 5.8.1.5. In the event that the Energy Secretary to the Government of Odisha fails to provide its decision within the above said period after being requested as aforesaid, or in the event that either OREDA or the Successful Bidder is dissatisfied with any such decision, either Party may, within fifteen (15) Days after the date on which such decision is required to be provided in accordance with GCC Clause 5.8.1.4, whether the decision is provided by the concerned Secretary of the admin department to the Government of Odisha during such period or not, refer the matter in dispute to arbitration as hereinafter provided in GCC Clause 5.8.2.
- 5.8.1.6. The Successful Bidder shall continue to perform its obligations under this Contract during this mutual settlement.

5.8.2. Arbitration

- 5.8.2.1. If disputes or differences between the Parties are not resolved under Clause 5.8.1, the same shall be referred for arbitration under the Indian Arbitration and Conciliation Act, 1996.
- 5.8.2.2. The arbitral tribunal shall consist of a sole arbitrator, who shall be appointed by the Parties mutually, in accordance with the Arbitration and Conciliation Act, 1996.
- 5.8.2.3. The Successful Bidder shall continue to perform its obligations under this Contract during the arbitration proceedings.
- 5.8.2.4. The arbitration proceedings shall be in English and shall take place in Bhubaneswar, Odisha. The courts in Bhubaneswar, Odisha shall have jurisdiction on any matter connected with or arising under this Contract. The law governing the arbitration and the process shall be Indian law only.
- 5.8.2.5. The arbitration shall be the sole and exclusive remedy between the Parties regarding the dispute referred to arbitration and any claims, counterclaims, issues or accountings presented to the tribunal in connection with such dispute.
- 5.8.2.6. The award rendered in any arbitration commenced hereunder shall be final, conclusive, and binding on the Parties.
- 5.8.2.7. The Parties hereby undertake to implement the award with an immediate effect.

6. Special Conditions of Work Order (SCC)

Section 6 (SCC) shall supplement the Clauses mentioned in Section 5 (GCC). Whenever there are a conflict or interpretation issues, the provisions herein shall prevail over those in Section 6 (SCC). The Clause number of Section 6 (SCC) is the corresponding Clause number of Section 5 (GCC).

6.1. Specific provisions of GCC

SCC Clause reference	GCC Clause reference	Detailed Clause						
6.1.1.	GCC Clause 5.2.2.1	Payment:						
	5.2.2.1	The payment shall be made in the following manner:						
		Milestone	Payment term	Support documents				
		On completion of mould	Ten percent (10%) of total value.	a) Supporting Photographs				
				And verification letter Signed by the				
				commissioning committee of OREDA				
		On completion of demoulding of Hull	Twenty-five (25%) percent of the total value	a) Supporting Photographs				
				And verification letter Signed by the commissioning committee of OREDA				
		On completion of the super	Twenty-five (25%) percent	b) Photographs of all installations in a specified manner				
		structure and installation of the engine,	of the total value	And verification letter Signed by the commissioning committee of OREDA				
		battery and solar panel etc						
		On completion of boat including cabin,toilet,	Twenty (20%) percent of the total value	c) Photographs of all installations in a specified manner				
		steering system, seating, life	totai vaiue	And verification letter Signed by the commissioning committee of OREDA				
		saving appliances (LSA), and fire						
		fighting appliances (FFA), GPS,						
		navigational						
		compass On successful launching and Acceptance of the boats	Twenty percent (20%) of the Initial Capex along with applicable tax at the	a) Joint Commissioning Certificate (JCC)				
				b) Warranty certificates				
				c) GPS based photograph				
				d) Submission of the executed version of CMC as per the sample format provided in Annexure Clause 7.3.3				
				e) CMC Manual				
				f) Dos & Don'ts in the form of a booklet				
				g) Compliance to CRC process using the ReSolve Mobile Application				
				h) Acceptance Certificate				
		Each stage payment will be released after inspection by the purchaser beneficiary dept (OTDC/CDA)/ authorized person of OREDA/OTDC/CI						

6.1.2.	-	Completion of Boat:
		Having undergone trials as provided herein the boat shall be presented to the Owner/ Engineer-in-Charge at the manufacturer/ bidder's yard duly completed and equipped including all extras and alterations ordered under relevant clause of the tender document and will defects made good hereinafter provided on or before five (05) months from the date of issue of Work Order.
6.1.3	-	Operation & Maintenance:
		If any defect, or symptom of weakness, whether arising from faulty design or defective material or workmanship in the zero emission solar boat become apparent, it shall be notified to the Manufacturer/bidder within twelve months from the date of acceptance of the vessel and the manufacturer/bidder shall, entirely at its own expense, make good of the said defects or weakness or shall pay to the Owner a sum equivalent to the cost of making good such defects or weakness, provided that the manufacturer/bidder shall not be liable for any defect or weakness in any machinery or equipment supplied by the Owner for installation in the zero emission solar boats nor shall they be bound to repair or be under any liability in respect of any damage caused by accident of the Sea, rivers or navigation, or fire or management or neglect of the persons in control or possession of the zero emission solar boat for the time being, their agents, officers or servants. Such replacement part, as may be installed or fitted during the guarantee period shall, where appropriate be guaranteed against further defect for a period of twelve months from its installation, or fitting.
6.1.4	-	Deployment of Engineer:
		The manufacturer/bidder may engage a competent engineer for the vessels for a period of three months, if necessary, at its own cost and risk. He will work on board the vessels at the option of the manufacturer/bidder.
6.1.5	-	Other Specific provisions:
		a) The contract price shall include the cost of all royalties, license fees and similar expenses in respect of any invention, process; drawing model, plan or information required for performance of the contract and the manufacturer/bidder shall indemnify the Owner/ OREDA against any claims, proceedings, damages, costs and expenses in respect thereof.
		b) Except with the consent in writing of the Owner the manufacturer/bidder shall not disclose this contract or any provision thereof, or approved specification and drawings or any part thereof or any information issued or furnished by or on behalf of the Owner in connection therewith to any person other than a person employed or engaged by the manufacturer/bidder in carrying out this contract.
		c) Any disclosure to any person as permitted above under clause 6.1.5 b) shall be made in confidence and shall extend so far as necessary for the purpose of this contract or the approved specifications and drawings or any part thereof or of any information mentioned above of this clause for the purpose of carrying out this contract.
		d) This contract shall abide by and be read and construed in accordance with the laws of the Republic of India and jurisdiction of the Court of Odisha.
		e) All disputes arising from the application, interpretation or execution of the contract shall be dealt with as per the law of the land then in force.
		f) The manufacturer/bidder should furnish a declaration that he is not related to any officer of Commerce and Transport Department of Government of Odisha of the rank of Assistant Engineer and above, engaged in the work and any officer of the rank of Under Secretary and above.

- g) All taxes and duties payable in connection with procurement of the zero emission solar boat shall be borne by the manufacturer/bidder.
- Except as expressly provided in this contract, previous negotiations and correspondences relating to this contract shall be deemed to be null and void.
- i) The contract shall come into full force on the date when duly signed by both the parties and duly authenticated by witnesses.
- j) The terms and conditions of the contract shall be deemed to be completely fulfilled by the manufacturer/bidder only when the performance guarantee is released by OREDA on completion of the work.
- k) OREDA/ the Owner may order modifications at any time before the completion of the work. No modification shall be made unless ordered Such modification will not vitiate the contract. For all modifications, the OREDA/ the Owner will issue revised plans or written instruction or both and no modification shall be made unless so authorized.
- All materials, articles and workmanship shall be of the most suitable quality for the work.
- m) Manufacturer/bidder shall provide and install all necessary construction plant and use such methods and appliances for the performance of all operations connected with the work covered under the contract as well secure a satisfactory quality of work and rate of progress which will ensure the completion of the work within the time specified.
- n) The manufacturer/bidder shall, unless otherwise specifically provided in the contract, pay all duties, tolls and other taxes on all materials and articles under the provisions of relevant law existing in force.
- Any amount due from the manufacturer/bidder as advised by OREDA shall be recovered from any bill or money retained from the manufacturer/bidder.

6.1.6 - Foreclosure of work by OREDA:

a) If, at any time, after award of the contract, OREDA for any reason whatsoever does not require the whole or any part of the works to be carried out, OREDA shall give notice in writing to that effect to the manufacturer/bidder. The manufacturer/bidder shall not have claim on account of any profit or advantage which it might have derived from the execution of such works. Therefore, the manufacturer/bidder shall be paid at the contract rates and a reasonable amount for works executed as certified by OREDA for the items under the contract subject to following conditions, namely:

Materials supplied, if any, by OREDA/ the Owner shall be returned to OREDA/ the Owner store at rates at which these were originally issued.

Transportation of manufacturer/firm's tools and plants from the manufacturer/firm permanent stores to the site and from the site to the manufacturer/firm's permanent stores will always be on his own account.

After the closure of the work, demobilization and repatriation of manufacturer/bidder's staff and all kinds of labour will be on his own account.

b) The manufacturer/bidder shall pay his labour the wages as stipulated under the Minimum Wages Act. He shall take all safety measures to

	protect the labourers so employed from any hazards. The Owner, OREDA and its representatives shall not be held liable for any untoward incident causing any harm to the labourers. The manufacturer/bidder shall defend the Owner, OREDA in all legal proceedings for violation of any act done by him in non-fulfilment of any statutory obligation. c) Any dispute on interpretation of processing of the contract as regards the nature of work and quantum of payment shall be amicably resolved and decision of the OREDA shall be Final and binding.
6.1.7	Insurance The manufacturer/firm shall at his own cost keep the vessels and all machineries materials, plans, drawings and other things used or intended for use in the construction and fitting out of the vessel fully insured in the joint name of the owner/Engineer-in-charge and the manufacturer/firm in a sum not less than 100% of the full replacement value thereof in office to be approved by the owner/Engineer in charge, such insurance to cover fire, natural calamities, launching and all other risks which for the time being can be covered up during vessel construction and at all time thereafter up to the date of acceptance of the vessel, by the owner, engineer in charge and the manufacturing firm shall produce the policy of such insurance and the receipt of the premiums for inspection by the owner/engineer in charge whenever requested. In the event of constructive total loss, the owner/engineer in charge shall be indemnified to the full benefits consistent with the instalments of contract price already paid to the manufacturer/ firm.

7. Annexure

7.1. Bid Forms - Technical Bid

7.1.1. Bid Form 1 (Bid Processing Fee)

Bid Processing Fee

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]
NIT no.: [insert .] dated [DD MMM YYYY]

То

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

ceoreda@oredaorissa.com

We, the undersigned, attaching the copy of the Bid Processing Fee paid to the E-procurement Website "www.tenderwizard.com/OREDA".

The Unique Transaction Reference (UTR) no. is [insert the UTR no.], dated [DD MMM YYYY].

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.2. Bid Form 2 (Cost of Bid)

Cost of Bid

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

Τo

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.

Email: ceoreda@oredaorissa.com

We, the undersigned, attaching the copy of the Cost of Bid submitted in the form of Demand Draft.				

The Demand Draft no. is [insert], dated [DD MMM YYYY].

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.3. Bid Form 3 (Bid Security)

Bid Security

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

Τo

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.

Email: ceoreda@oredaorissa.com

We, the undersigned, attaching the copy of the Bid Security submitted in the form of [Demand Draft/ Fixed Deposit Receipt/ Bank Guarantee].

The Demand Draft no. is [insert], dated [DD MMM YYYY] (in case of a demand draft), or

The Fixed Deposit Receipt no. is [insert], dated [DD MMM YYYY]. (in case of an FDR)

The Bank Guarantee no. is [insert], dated [DD MMM YYYY]. (in case of a Bank Guarantee)

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name]

Seal: [insert seal of the Bidder]

Bid Security (applicable only in case of Bank Guarantee)

(To be submitted on a non-judicial stamp paper of appropriate value as per The Indian Stamp Act, 1899 relevant to the place of execution. The stamp paper shall be purchased in the name of the issuing bank only.)

Bank Guarantee (BG) no.: [insert BG no.]

Date: [DD MMM YYYY]

Tο

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

WHEREAS M/s. [insert name of the Bidder] having its registered office at [insert address] (hereinafter called "the Bidder") wish to submit its Bid for the selection as an Engineering, Procurement and Construction (EPC) Successful Bidder for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP Solar electric boats, with zero emissionalong with Comprehensive Maintenance forTwo (02) years with reference to NIT no. [insert NIT no.] dated [DD MMM YYYY].

AND WHEREAS it has been stipulated by OREDA in the said NIT that the Bidder shall furnish OREDA with a Bank Guarantee from a nationalized or scheduled commercial bank for the sum specified therein, as Bid Security for compliance with its obligations in accordance with the Bidding Document.

AND WHEREAS we have agreed to give the Bidder such a Bid Security in the form of this Bank Guarantee. NOW THEREFORE we hereby affirm that we are the guarantors and responsible to OREDA on behalf of the Bidder for an amount up to a total of INR [Amount of the Bank Guarantee in words]([Indian Rupees in figures]) only and we undertake to pay OREDA upon OREDA's first written demand declaring the Bidder to be in default under the various provisions of the Bidding Document and without cavil or argument, any sum or sums within the limits of the amount of Bank Guarantee, as aforesaid, without OREDA's need to prove or to show grounds or reasons for the demand or the sum specified therein. We hereby waive the necessity of your demanding of the said demand from the Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Bidding Document to be performed thereunder or any of the contract documents which may be made between you and the Bidder shall in any way release us from any liability under this Bank Guarantee and we hereby waive notice of any such change, addition or modification.

This Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the issuing bank.

This Bank Guarantee shall be a primary obligation of the issuing bank and accordingly OREDA shall not be obliged before enforcing this Bank Guarantee to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by OREDA or to exercise, levy or enforce any distress, diligence or other processes against the Bidder.

This Bank Guarantee shall be interpreted in accordance with the laws of India and the courts at Bhubaneswar, Odisha shall have exclusive jurisdiction.

This Bank Guarantee shall be effective only when the Bank Guarantee is issued to the account holder "Orissa Renewable Energy Development Agency" in the bank and branch "Axis Bank Ltd., Mancheswar Branch, Bhubaneswar" having the account no. 918010103435005 IFSC code UTIB0001973.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to INR [insert] (Indian Rupees [in words]) only and it shall remain with an expiry date up to [DD MMM YYYY, [insert] months from the original last date of submission of Bid] with a claim date up to [DD MMM YYYY, 12 months from the date of expiry] and shall be extended from time to time for such period, as may be desired by M/s. [insert the Bidder name] whose behalf this guarantee has been given.

Our branch at [Name and address of the branch] is liable to pay the guaranteed amount depending on the filing of the claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our [Name and address of the branch] branch a written claim or demand and received by us at our [Name and address of the branch] branch, otherwise the bank shall be discharged of all liabilities under this guarantee thereafter.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on [DD MMM YYYY] at [insert location of signing].

(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, name and address of the Bank and address of the Branch Power
of attorney no.:

WITNESSES

Signature: Signature: Name: Name: Address: Address:

Note:

- i. This Bank Guarantee format is prepared in line with the Annexure-II of Finance Department Office Memorandum 4939 dated 13 Feb 2012, Govt of Odisha [Ref Para 22(i1].
- ii. Please ensure that each page of the Bank Guarantee is duly signed by the authorized signatory of the issuing bank and stamp of the issuing bank is affixed thereon.
- iii. Please ensure whether the last page is signed with full particulars including two witnesses under the seal of Bank as required in the prescribed format.
- iv. Please ensure that the date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of the stamp paper under the signature of the stamp vendor. The date of purchase of stamp paper shall be not later than the date of execution of the Bank Guarantee.
- v. In case of any overwriting, cutting, etc. on the Bank Guarantee have been properly authenticated under signature and seal of the authorized office of the issuing bank.

Additional Performance Security (as applicable)

(To be submitted on a non-judicial stamp paper of appropriate value as per The Indian Stamp Act,1899 relevant to the place of execution. The stamp paper shall be purchased in the name of the issuing bank only.)

Bank Guarantee (BG) no.: [insert BG no.]

Date: [DD MMM YYYY]

Tο

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

WHEREAS M/s. [insert name of the Successful Bidder] having its registered office at [insert address] (hereinafter called "the Successful Bidder") has been selected as the Successful Bidder for the selection as an Engineering, Procurement and Construction (EPC) Successful Bidder for Design, Engineering, Supply, Installation, Testing and Commissioning of Rooftop Solar Power System (RSPS) with 6 hours battery backup system and Comprehensive Maintenance for Five (5) years at schools with reference to NIT no. [insert NIT no.] dated [DD MMM YYYY] and Letter of Intent (LOI) no. [insert LOI no.] dated [DD MMM YYYY].

AND WHEREAS it has been stipulated by OREDA in the said Bidding Document that the Successful Bidder shall furnish OREDA with a Bank Guarantee from a nationalized or scheduled commercial bank for the sum specified therein, as Performance Security for compliance with its obligations in accordance with the Bidding Document, the Letter of Intent and the Work Order to be issued by OREDA.

AND WHEREAS we have agreed to give the Successful Bidder such a Performance Security in the form of this Bank Guarantee. NOW THEREFORE we hereby affirm that we are the guarantors and responsible to OREDA on behalf of the Successful Bidder for an amount up to a total of INR [Amount of the Bank Guarantee in words] ([Indian Rupees in figures]) only and we undertake to pay OREDA upon OREDA's first written demand declaring the Successful Bidder to be in default under the various provisions of the Bidding Document and/ or the Work Order to be issued by OREDA and without cavil or argument, any sum or sums within the limits of the amount of Bank Guarantee, as aforesaid, without OREDA's need to prove or to show grounds or reasons for the demand or the sum specified therein. We hereby waive the necessity of your demanding of the said demand from the Successful Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Bidding Document and/ or the Work Order to be issued by OREDA to be performed there under or any of the contract documents which may be made between you and the Successful Bidder shall in any way release us from any liability under this Bank Guarantee and we hereby waive notice of any such change, addition or modification.

This Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the issuing bank.

This Bank Guarantee shall be a primary obligation of the issuing bank and accordingly OREDA shall not be obliged before enforcing this Bank Guarantee to take any action in any court or arbitral proceedings against the Successful Bidder, to make any claim against or any demand on the Successful Bidder or to give any notice to the Successful Bidder or to enforce any security held by OREDA or to exercise, levy or enforce any distress, diligence or other processes against the Successful Bidder.

This Bank Guarantee shall be interpreted in accordance with the laws of India and the courts at Bhubaneswar, Odisha shall have exclusive jurisdiction.

This Bank Guarantee shall be effective only when the Bank Guarantee is issued to the account holder "Orissa Renewable Energy Development Agency" in the bank and branch "Axis Bank Ltd., Mancheswar Branch, Bhubaneswar" having the account no. 918010103435005 IFSC code UTIB0001973.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to INR [insert] (Indian Rupees [in words]) only and it shall remain with an expiry date up to [DD MMM YYYY, [insert] months from the original last date of submission of Bid] with a claim date up to [DD MMM YYYY, 12 months from the date of expiry] and shall be extended from time to time for such period, as may be desired by M/s. [insert the Successful Bidder name] whose behalf this guarantee has been given.

Our branch at [Name and address of the branch] is liable to pay the guaranteed amount depending on the filing of a claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our [Name and address of the branch] branch a written claim or demand and received by us at our [Name and address of the branch] branch, otherwise the bank shall be discharged of all liabilities under this guarantee thereafter.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on [DD MMM YYYY] at [insert location of signing].

(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, name and address of the Bank and address of the Branch Power
of attorney no.:
WITNESSES

Signature: Signature: Name: Name: Address: Address:

Note:

- 1. This Bank Guarantee format is prepared in line with the Annexure-II of Finance Department Office Memorandum 4939 dated 13 Feb 2012, Govt of Odisha [Ref Para 22(i1].
- 2. Please ensure that each page of the Bank Guarantee is duly signed by the authorized signatory of the issuing bank and stamp of the issuing bank is affixed thereon.
- 3. Please ensure whether the last page is signed with full particulars including two witnesses under the seal of Bank as required in the prescribed format.
- 4. Please ensure that the date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of the stamp paper under the signature of the stamp vendor. The date of purchase of stamp paper shall be not later than the date of execution of the Bank Guarantee.
- 5. In case of any overwriting, cutting, etc. on the Bank Guarantee have been properly authenticated under signature and seal of the authorized office of the issuing bank.

7.1.4. Bid Form 4 (Power of Attorney)

Power of Attorney

(To be submitted on a non-judicial stamp paper of appropriate value as per The Indian Stamp Act, 1899 relevant to the place of execution. The stamp paper shall be purchased in the name of the Bidder only.)

Signature and stamp of the notary of the place of execution [insert place] dated [DD MMM YYYY]

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

Know all men by these presents, We, [name of the executant(s)], do hereby constitute, appoint and authorize [name of the Authorized Signatory] as the Authorized Signatory presently residing at [residential address of Authorized Signatory] and having PAN [insert PAN no. of Authorized Signatory] who is presently employed with us and holding the designation of [designation of the Authorized Signatory] as our true and lawful representative, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for the selection as an Engineering, Procurement and Construction (EPC) Successful Bidder for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emissionalong with Comprehensive Maintenance for Two (02) years with reference to the NIT no. [insert NIT no.] dated [DD MMM YYYY] issued by Odisha Renewable Energy Development Agency ("OREDA").

The Authorized Signatory shall represent us and shall be responsible for the signing of the Bid, submission of the Bid and executing all other documents related to this Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which OREDA may require us to submit. The Authorized Signatory is further authorized to make representations to OREDA and provide information/ responses to OREDA, representing us in all matters before OREDA, and generally dealing with OREDA in all matters in connection with our Bid and during the performance of the Work Order.

We hereby agree to ratify all acts, deeds and things are done by our said Authorized Signatory pursuant to this Power of Attorney and that all acts, deeds and things are done by our aforesaid Authorized Signatory shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the Bidding Document.

Signature of the executant Name: Designation: Address: Company:
Accepted by
Signature of the Authorized Signatory
Name: Designation: Address: Company:

the clause under "Seal" of the Article of Association.	
Board resolution dated [DD MMM YYYY] is attached	below.
WITNESS	
Signature: Name: Address:	Signature: Name: Address:

Common seal of [name of the Bidder] is affixed in [my/our] presence pursuant to the provisions mentioned in

Notes:

- 1. The mode of execution of the power of attorney shall be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same shall be under the common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by a Board Resolution.
- 2. The person authorized under this Power of Attorney shall be a person holding the responsible post and designation in the company.
- 3. The Board Resolution forms a part of the Power of Attorney.

Board Resolution

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]
NIT no.: [insert NIT no.]

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED IN THE MEETING OF THE BOARD OF DIRECTORS OF M/S. [insert name of the Bidder] HAVING ITS REGISTERED OFFICE AT [insert office address of the Bidder] HELD ON [DD MMM YYYY] AT [HHMM]HRS.

Resolved that we, [insert name of the Bidder], do agree to participate in the NIT invited by OREDA vide NIT no. [insert NIT no.] dated [DD MMM YYYY] for the selection as an Engineering, Procurement and Construction (EPC) Successful Bidder for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP Solar electric boats, with zero emissionalong with Comprehensive Maintenance for Two (02) years.

RESOLVED FURTHER THAT, [insert name of the Bidder] agrees to unconditionally accept all terms and conditions mentioned in the aforementioned Bidding Document.

RESOLVED FURTHER THAT, Ms./ Mr. [Name of the Authorized Signatory] [is/ are] presently residing at [residential address of Authorized Signatory] and having PAN [insert PAN no. of Authorized Signatory] who is presently employed with us and holding the designation of [designation of the Authorized Signatory] is the Authorized Signatory of [insert name of the Bidder] be and hereby authorized to sign, execute and submit such applications, undertakings, agreements and other requisite documents writings and deeds as may be deemed necessary or expedient to implement the above Project.

AND RESOLVED FURTHER THAT, the common seal of the company is affixed, wherever necessary, in accordance with the applicable procedure laid down by the applicable law and the charter documents. For [insert name of the Bidder]

Chairman/ Director/ Company Secretary (Signatory of the Board Resolution)

Name of the Authorized Signatory Specimen signature of Authorized Signatory

Note: The above signature(s) to be attested by the person signing the resolution

7.1.5. Bid Form 5 (Covering Letter of Technical Bid)

Covering Letter of Technical Bid

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

To

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

ceoreda@oredaorissa.com

Sub: Submission of Technical Bid for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emission along with Comprehensive Maintenance for Two (02) years.

Dear [Sir/ Madam],

Having examined the Bidding Document carefully, We, the undersigned, offer to submit herewith the Technical Bid as per the subject line and NIT no. mentioned above.

We are submitting our Bid and we have applied for the following Project:

We hereby undertake the following:

- 1. We have read all the provision of the Bidding Document and confirm that notwithstanding anything stated elsewhere in our Technical Bid to the contrary, the provisions of the Bidding Document are acceptable to us and we further confirm that we have not taken any deviation to the provision of the NIT anywhere in our Bid. Acceptance of the above attribute shall be considered as our confirmation that any deviation, variation or additional condition, etc. or any mention, contrary to the provisions of Bidding Document found anywhere in our Technical Bid implicit or explicit shall stand unconditionally withdrawn, without any cost implication whatsoever to OREDA.
- 2. We further declare that any additional conditions, variations, deviations, if any, in our Bid shall not be given effect to. We further understand that any deficiency or illegibility in our Technical Bid shall result in rejection of our Technical Bid.
- 3. We hereby declare that all the information and statements made in this proposal are complete, true and correct and also accept that any misinterpretation contained in it may lead to our disqualification and rejection of our Technical Bid. In case of any false documents submitted and found any time in the future, we shall be liable to be proceeded as per Applicable Law.
- 4. Weconfirm that we have submitted the Technical Bid as per the instructions given in the Bidding Document.
- 5. We hereby declare and confirm that only we are submitting our Bid and that our parent, affiliate, the ultimate parent or any group companies with which we have direct or indirect relationships are not separately submitting their Bid.
- 6. We hereby declare that our application has been submitted in good faith and the information contained is true and correct to the best of our knowledge and belief.
- 7. We confirm that the Technical Bid submitted are subject to the verification solely by appropriate authorities of OREDA as per all the terms of the Bidding Document and agree that the decision taken by OREDA shall be final and binding on us.
- 8. We declare that our Technical Bid is fully compliant to the qualification requirement mentioned under Section 4 (QR) and we have not misrepresented any information provided in our Bid.
- 9. We confirm that any genuine changes made by OREDA in the interest of the Project with respect to the Technical Specifications, Designs and Drawings during the course of performance of the Work Order shall be fully acceptable to us without any cost implication whatsoever to OREDA.
- 10. We confirm that we will comply with all the Applicable Laws and Prudent Utility Practices all the time during the performance of the Work Order.
- 11. We confirm that we have submitted the Technical Bid as per the forms given in Bid Form (Technical Bid) and/ or the instructions given in the NIT or E-procurement Website; failure to which our Technical Bid shall be considered as non-responsive and shall be liable for rejection.

- 12. We agree that We have not submitted any conditional or alternative Technical Bid and in case of any deviation, then our Technical Bid shall be considered as non-responsive and shall be liable for rejection.
- 13. We confirm that we do not have any conflict of interest in accordance with the provisions of the NIT.
- 14. We confirm that in case we are directly or indirectly through an agent engaged in Corrupt Practice, Fraudulent Practice, Coercive Practice, Collusive Practice, Obstructive Practice or Integrity Violation, then our Technical Bid shall be considered as non-responsive and shall be liable for rejection.
- 15. We confirm that OREDA reserves all the right to accept or reject any Technical Bid without assigning any reasons thereof and shall not be held liable for any such action and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- 16. We confirm that in case our Bid is accepted, we undertake to provide Contract Performance Securities as specified in the NIT, else our Bid Security shall be forfeited.
- 17. We agree that this Technical Bid shall remain valid for a period of One Hundred and Eighty (180) Days from the original last date of online Bid submission and such further period as may be mutually agreed upon.
- 18. The Bidding Document has been discussed in the Board meeting and a Board Resolution (BR) no. [insert BR no.1 dated IDD MMM YYYYI has been concurred for submission of our Bid and is enclosed as a part of Bid Form 4 (Power of Attorney).
- 19. We undertake that OREDA shall, without prejudice to any other right or remedy, be at liberty to forfeit the Bid Security deposited by us in case of any default as per the Bidding Document.
- 20. In case we fail to achieve the milestones of Commissioning and Acceptance of the Project as per the Project Timelines, OREDA shall, without prejudice to any other right or remedy, be at liberty to forfeit the Performance Security.
- 21. We confirm that we shall establish a central office at Bhubaneswar, Odisha and also establish local offices at the concerned district so as to deliver uninterrupted and sustainable Comprehensive Maintenance during the CMC Period.
- 22. We understand that you are not bound to accept any Technical Bid you may receive.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.6. Bid Form 6 (Technical Qualification)

Technical Qualification - Zero emission solar boat projects (To

be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

ceoreda@oredaorissa.com

We confirm that we meet the Qualification Requirement mentioned in QR Clause 4.3 of Section 4 (QR) and we have the experience of commissioning zero emission solar boat projects as mentioned under the "Our experience in number of projects commissioned" for which it is submitting its Bid, in the last five (5) years from the last date of online submission of the Technical Bid in Odisha as the EPC contractor.

As per QR Clause 4.3.1, and Clause 4.3.2 our experiences are as follows:

Technical Qualification	Number of Projects	Reference project no.		
	Commissioned			
Our experience of commissioning of zero emission solar boat				
Our experience successfully completing 5 years of comprehensive maintenance of zero emission solar boat				

The details pertaining to the reference projects are given below:

	etails pertaining to the reference projects are given below:						
Sr.	Item Description	Reference project [insert]**					
No.							
1.	Title of the project with a brief of scope						
2.	Actual project cost	[insert] Lakh INR					
3.	Name of the client with the full address including	Name of the client:					
	the contact no. and email id of the client	Address:					
		Contact no.:					
		Email id:					
4.	Name of the ultimate user of zero emission solar						
	boat						
5.	Location of the project and GPS/ Google	Address of the plant:					
	coordinate	GPS/ Google coordinate:					
6.	I have attached the relevant letter of awards/	[Yes/ No]					
	work orders/ contract agreement along with any						
	amendments issued in full without deleting/						
	hiding any information						
7.	Details of the letter of awards/ work orders/	Work order no.:					
	contract	Date of work order: [DD MMM YYYY]					
		Whether any liquidated damages been charged					
		by the client? [Yes/ No]. In case of yes, please					
		provide the details.					
8.	I have attached the Joint Commissioning	[Yes/ No]					
	Certificate issued by the concerned government						
	authority as per the Prudent Utility Practices						
	followed in Odisha						
Sr.	Item Description	Reference project [insert]**					
No.							

11.	Details of the Joint Commissioning Certificate	Name of the government authority issuing the Joint Commissioning Certificate: [insert]
		Target date of commissioning: [DD MMM YYYY]
		Actual date of commissioning: [DD MMM YYYY]

^{**} in case of multiple reference projects, please keep on adding separate columns.

The scan copies of the letter of awards/ work orders/ contract along with the associated Joint Commissioning Certificates are enclosed below:

[Please attached the proof of documents]

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.7. Bid Form 7 (Financial Qualification)

Financial Qualification

(To be submitted on the letterhead of the chartered accountant)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

To

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha, Email:

ceoreda@oredaorissa.com

I, [insert name of the chartered accountant], confirm that the Bidder, [insert name of the Bidder], meets the Financial Qualification Requirement as mentioned in QR Clause 4.4 of Section 4 (Qualification Requirement). The compliance to the Financial Qualification Requirement is mentioned below, as per our detailed evaluation of the Bidder's latest certified true copy of the audited annual accounts and their work orders related to the solar business.

Average annual turnover (as per QR Clause 4.4.1),

Particulars	Unit	FY 17-18	FY18-19	FY19-20	FY20-21	FY 21-22
Annual turnover from solar	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]
business only#						
Average annual turnover from	Lakh INR					[insert]
zero emission solar						
boatbusiness only#						

[#] other income is not considered

Net Worth (as per QR Clause 4.4.2) (applicable in case of companies),

Table 1

Particulars	Unit	FY18-19	FY19-20	FY20-21	FY 21-22	FY 22-23
Aggregate value of the paid-up share capital	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]
Add: all reserves created out of the profits and securities premium account.	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]
Subtract: Accumulated losses	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]
Subtract: Deferred expenditure	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]
Subtract: Miscellaneous expenditure not written off	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]
Net Worth*	Lakh INR	[insert]	[insert]	[insert]	[insert]	[insert]

Note: It does not include reserves created out of revaluation of assets, write-back of depreciation and amalgamation.

[For partnership firm and sole proprietorship firm, as per the methodology certified by the chartered accountant based on the Applicable Law in India.]

I hereby declare that all the information and statements made in this certificate are complete, true and correct and also accept that any misinterpretation contained in it may lead to cancellation of my CA membership, and I shall be liable to be proceeded as per the Applicable Law.

Place: [sign here] [insert Signature

place] Name of Chartered Accountant (CA): [insert name]

Designation: [insert designation]

Name of the firm of the CA: [insert Bidder's legal entity name] CA membership no.: [insert CA membership no.]

Registration no. of the CA's firm: Seal: [insert seal of the Bidder]

7.1.8. Bid Form 8 (Test Certificates)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.

Email: ceoreda@oredaorissa.com

We, the undersigned, declare that the "**Test Certificates**" for the Equipment will be issued to us from the valid MNRE/ NABL/ BIS/IACS authorized Test Labs, pursuant to the requirements as mentioned in QR Clause 4.2.1.

SI. No.	Major Component	Test Certificates Required	Test description	Designated Test Labs
1	Crystalline Silicon Terrestrial PV Modules	IEC 61215	Design qualification	MNRE/NABL/BIS authorized Test Labs
		IEC 61730	Safety Qualification	MNRE/NABL/BIS authorized Test Labs
		IEC 61701	Salt Mist Corrosion Test	MNRE/NABL/BIS authorized Test Labs
		IEC 60068	Environmental Test	MNRE/NABL/BIS authorized Test Labs
		IEC 62116	Anti-Islanding Protection	MNRE/NABL/BIS authorized Test Labs
		IEC 61727	Grid Interconnection	MNRE/NABL/BIS authorized Test Labs
		IP 65/56	Ingress Protection for Outdoor/Indoor Enclosure	MNRE/NABL/BIS authorized Test Labs
2	Zero emission solar boat			IACS/IWT authorized Test Labs

Note: The proof of all documents showcasing the possession of such copies of the Test Certificates by the Bidder shall be submitted as per the instructions given under the Letter of Intent and not at the time of bidding.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity name]

Seal: [insert seal of the Bidder]

7.1.9. Bid Form 9 (Self-certificate)

Self-certificate

(To be submitted on a non-judicial stamp paper of appropriate value as per The Indian Stamp Act,1899 relevant to the place of execution. The stamp paper shall be purchased in the name of the Bidder only.)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

To

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

We, the undersigned, confirm and certify that we have not been debarred/ blacklisted/ defaulted by any Government, agency, Public Sector Undertaking (PSU), institution/ autonomous organizations in the past. We have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed or thing which is or could be regarded as anti-competitive.

I/we hereby declare the following in the context of the aforementioned tender that:

In case of any false documents submitted and found in the future, we shall be liable to be proceeded against as per the Applicable Law.

In case of any such events, we have provided the case details and their current status below. [strike-off this line, in case it is not applicable].

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.10. Bid Form 10 (Undertaking for Indigenousness)

Undertaking for Indigenousness

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

ceoreda@oredaorissa.com

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

We, [insert the Bidder name], hereby certify and confirm that all the Equipment to be supplied under this Project shall be indigenous and not fully imported, as per the relevant guidelines of the Ministry of New and Renewable Energy (MNRE)/ Ministry of Port, shipping, waterways, Government of India.

The relevant certificates are enclosed herewith.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.11. Bid Form 11 (No Deviation Certificate)

No Deviation Certificate

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

RFP no.: [insert RFP no.] dated [DD MMM YYYY]

To

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.

Email: ceoreda@oredaorissa.com

We, [insert the Bidder name], hereby certify and confirm that we have read the clauses and provisions of the RFP, Addendums, Corrigendum, etc. issued thereafter and the stipulation of all clauses and provisions are acceptable to us, and we have not taken any deviation whatsoever to any of the clauses and provisions.

*In case the Bidder has taken any deviation, then the same shall be mentioned here.

Clause No. Deviations considered, if any

[*strike-off, if not applicable]

We further confirm that we are aware that our Bid would be liable for rejection in case any material misrepresentation is made or discovered with regard to the requirements of this RFP at any stage of the bidding process or thereafter during the performance of the Work Order.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity name]

Seal: [insert seal of the Bidder]

7.1.12. Registration details

Registration details

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

RFP no.: [insert RFP no.] dated [DD MMM YYYY]

То

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha, Email:

ceoreda@oredaorissa.com

We, the undersigned, attaching the Certificate of Incorporation, Memorandum of Association (MOA) and Article of Association (AOA) [applicable in case of companies]. The **AOA** (if applicable) shall mention the company's operations and defines the company's purpose from the SOW point of view or

We, the undersigned, attaching the Partnership Deed [applicable in case of partnership firm]. or

We, the undersigned, attaching the proof of having the bank account or any other document as issued by the Government [applicable in case of sole proprietorship firm].

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

name] Seal: [insert seal of the Bidder]

7.1.13. PAN

PAN

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

RFP no.: [insert RFP no.] dated [DD MMM YYYY]

To

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.

Email: ceoreda@oredaorissa.com

We, the undersigned, attaching the copy of the PAN card.

The PAN is [insert PAN].

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.1.14. GST Certificate

GST Certificate

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

RFP no.: [insert RFP no.] dated [DD MMM YYYY]

То

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

We, the undersigned, attaching the copy of the GST Certificate.

The GST no. is [insert GST no.] and the place of GST registration is for the state of [insert state name].

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.1.15. Bid Form 15 (Income Tax Return)

Income Tax Return

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

ceoreda@oredaorissa.com

We, the undersigned, attaching the copy of the Income Tax Return for the last five (5) assessment years for FY2022-23, FY 21-22, FY20-21, FY 19-20, FY 18-19,.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.1.16. Bid Form 16 (Quality Assurance)

Quality Assurance

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

We, the undersigned, declare that we have a copy of the ISO certificate for ISO 9001 and will submit the copy of the ISO 14001 certificate in the name of the Original Equipment Manufacturer (OEM), supported by a letter of authorization from the OEM, as per QR Clause 4.2.2.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity name]

Seal: [insert seal of the Bidder]

Note: The documentary evidence shall be submitted as a part of the response to the Letter of Intent and prior to issuance of the Work Order, and not at the time of bidding.

7.1.17. Bid Form 17 (Summary of the Bidder)

Summary of the Bidder

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha.

Email: ceoreda@oredaorissa.com

We, the undersigned, attaching the summary of [insert name of the Bidder] in excel format.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.2. Bid Forms – Price Bid

7.2.1. Bid Form 19 (Covering Letter of Price Bid)

Covering Letter of Price Bid

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

Tο

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

ceoreda@oredaorissa.com

Sub: Submission of Price Bid for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP electric/ zero emission solar boats and retrofitting of existing boats with solar powered electric propulsion system, with zero emissionalong with Comprehensive Maintenance for Five (5) years

Dear [Sir/ Madam],

Having examined the Bidding Document carefully, We, the undersigned, offer to submit herewith the Price Bid as per the subject line and NIT no. mentioned above.

We agree that this Price Bid shall remain valid for a period of One Hundred and Eighty (180) Days from the original last date of online Bid submission and such further period as may be mutually agreed upon.

We have read all the provision of the Bidding Document and confirm that notwithstanding anything stated elsewhere in our Price Bid to the contrary, the provisions of the Bidding Document are acceptable to us and we further confirm that we have not taken any deviation to the provision of the NIT anywhere in our Bid. Acceptance of the above attribute shall be considered as our confirmation that any deviation, variation or additional condition, etc. or any mention, contrary to the provisions of Bidding Document found anywhere in our Price Bid implicit or explicit shall stand unconditionally withdrawn, without any cost implication whatsoever to OREDA.

We further declare that any additional conditions, variations, deviations, if any, in our Bid shall not be given effect to. We further understand that any deficiency or illegibility in our Price Bid shall result in rejection of our Price Bid.

We hereby declare that all the information and statements made in this proposal are complete, true and correct and also accept that any misinterpretation contained in it may lead to our disqualification and rejection of our Price Bid.

We hereby declare that our application has been submitted in good faith and the information contained is true and correct to the best of our knowledge and belief.

We agree with the following:

- We confirm that the Price Bid submitted are subject to the verification solely by appropriate authorities of OREDA as per all the terms of the Bidding Document and agree that the decision taken by OREDA shall be final and binding on us.
- 2. We declare that our Price Bid is fully compliant as per the terms of the Bidding Document.
- 3. We confirm that we have submitted the Price Bid in Indian Rupees only and the Price Bid will be considered up to two places of decimal only.
- 4. We confirm that any genuine changes made by OREDA in the interest of the Project with respect to the Technical Specifications, Designs and Drawings during the course of performance of the Work Order shall be fully acceptable to us without any cost implication whatsoever to OREDA.
- 5. We confirm that we will comply with all the Applicable Laws and Prudent Utility Practices all the time during the performance of the Work Order.

- 6. We confirm that we have submitted the Price Bid as per the forms given in Bid Form (Price Bid) and/ or the instructions given in the NIT or E-procurement Website; failure to which our Price Bid shall be considered as non-responsive and shall be liable for rejection.
- 7. We agree that We have not submitted any conditional or alternative Price Bid and in case of any deviation, then our Price Bid shall be considered as non-responsive and shall be liable for rejection.
- 8. We confirm that we have not mentioned the Price Bid anywhere other than the Price Bid on the E-procurement Website for further evaluation. If we submit the Price Bid on the E-procurement Website that is not in line with the instructions mentioned therein, then the Price Bid shall be considered as non-responsive and shall be liable for rejection.
- 9. We confirm that we do not have any conflict of interest in accordance with the provisions of the NIT.
- 10. We confirm that in case we are directly or indirectly through an agent engaged in Corrupt Practice, Fraudulent Practice, Coercive Practice, Collusive Practice, Obstructive Practice or Integrity Violation, then our Price Bid shall be considered as non-responsive and shall be liable for rejection.
- 11. We understand that you are not bound to accept any Price Bid you may receive.
- 12. We confirm that OREDA reserves all the right to accept or reject any Price Bid without assigning any reasons thereof and shall not be held liable for any such action and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- 13. We confirm that in case our Bid is accepted, we undertake to provide Contract Performance Securities as specified in the NIT, else our Bid Security shall be forfeited.
- 14. The rates quoted by us are firm, final and are meant for execution of the allotted supply/ installation within the time frame stipulated in the tender/ supply/ installation order.
- 15. We shall be responsible for the payment of the respective taxes to the appropriate authorities and should I/we fail to do so, I/we hereby authorize OREDA to recover the taxes due from us and deposit the same with the appropriate authorities on their demand.

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.2.2. Bid Form 20 (Price Bid - Category A Bidder)

Price Bid - Category A Bidder

(Sample Format)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

Particula	rs	Description					
Name of Project	the	Design, Engineering, Ma emission solar boats an system, with zero emission	d retrofit	ting of existing	boats with solar p	owered electri	c propulsion
Name of Bidder	the	[insert the Bidde	rs name]				
Category	of Bidder	Category A					
Package	Number	XX					
			Pr	ice Bid			
		Rooftop Solar Power	Systen	n (ZERO EMIS	SION SOLAR BO	AT)	
SI. No		Particulars		Price in INR exclusive of Taxes	Price in INR (in Words) exclusive of Taxes	Cumulative Capacity in numbers	Total Cost
1	Manufacti Transport zero emis zero emis	Ingineering, uring, Supply, ation, deployment of sion solar boats, with sion along with ensive Maintenance for ears	Α				To be Auto Calculated
	· · · · · · · · · · · · · · · · · · ·		Price	Bid - Project			

Note:

- 1. This format to be uploaded on the E-procurement Website as per the instruction given in the NIT.
- 2. GST rates will be applicable on the quoted price as per the prevailing tax rules in India.
- 3. Additional Performance Security amount to be deposited as mentioned in the NIT if applicable.

7.3. Letter of Intent Forms

7.3.1. LOI Form 1 (Letter of Intent)

Letter of Intent

(To be submitted on the letterhead of OREDA)

Letter of Intent no.: [insert Letter of Intent no.] dated [DD MMM YYYY]

From

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

To

[Bidder name] [Address]

Sub: Letter of Intent to the Successful Bidders for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP electric/ zero emission solar boats and retrofitting of existing boats with solar powered electric propulsion system, with zero emissionalong with Comprehensive Maintenance for Five (5) years.

Reference:

NIT no. [insert NIT no.] dated [DD MMM YYYY]

With reference to the above, you have been selected as the Successful Bidder and you are requested to submit the following critical documents within a maximum period of fifteen (15) Days from the date of issue of this Letter of Intent, without any fail, else your Bid shall be liable for rejection and the Bid Security submitted to us shall be forfeited.

SI. No	Critical documents
1.	Acceptance to the Letter of Intent by signing the copy of the Letter of Intent along with an official seal, date, and submission to OREDA
2.	Submission of Performance Security as per ITB Clause 1.6.3
3.	Submission of a detailed Workplan in line with the Project Timelines mentioned in the SOW Clause 5.4.2.2 for the implementation of zero emission solar boat and retrofit boat separately (as applicable).
4.	Submission of a site survey report with the finalization of the exact location of the Project and the plan for the separation of loads from the existing load for the purpose of implementation of the Project for the implementation of zero emission solar boat and retrofit boat separately (as applicable).
5.	Valid Test Certificates of the solar photovoltaic module, inverter and battery along with datasheets of all other Equipment of the Project for the implementation of zero emission solar boat and retrofit boat separately (as applicable).
6.	Contact information of various OEMs for the solar photovoltaic module, inverter, battery, solar street lighting systems and balance of systems of the Project for the implementation of zero emission solar boat and retrofit boat separately (as applicable).

7.	Single line diagram of the Project for the implementation of ZERO EMISSION SOLAR BOAT and SPP separately (as applicable).
SI. No	Critical documents
8.	Design document of the module mounting structure and pole mounting structure of the Project for the implementation of zero emission solar boat and retrofit boat separately (as applicable) along with a STAD pro analysis report as a part of the mandatory submission.
9.	Detailed bill of materials along with spares

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.3.2. LOI Form 2 (Performance Security)

Performance Security (in the form of a Bank Guarantee)

(To be submitted on a non-judicial stamp paper of appropriate value as per The Indian Stamp Act,1899 relevant to the place of execution. The stamp paper shall be purchased in the name of the issuing bank only.)

Bank Guarantee (BG) no.: [insert BG no.]

Date: [DD MMM YYYY]

Tο

The Chief Executive
Odisha Renewable Energy Development Agency (OREDA)
Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email: ceoreda@oredaorissa.com

WHEREAS M/s. [insert name of the Successful Bidder] having its registered office at [insert address] (hereinafter called "the Successful Bidder") has been selected as the Successful Bidder for the selection as an Engineering, Procurement and Construction (EPC) Successful Bidder for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emissionalong with Comprehensive Maintenance for Two (02) years with reference to NIT no. [insert NIT no.] dated [DD MMM YYYY] and Letter of Intent (LOI) no. [insert LOI no.] dated [DD MMM YYYY].

AND WHEREAS it has been stipulated by OREDA in the said Bidding Document that the Successful Bidder shall furnish OREDA with a Bank Guarantee from a nationalized or scheduled commercial bank for the sum specified therein, as Performance Security for compliance with its obligations in accordance with the Bidding Document, the Letter of Intent and the Work Order to be issued by OREDA.

AND WHEREAS we have agreed to give the Successful Bidder such a Performance Security in the form of this Bank Guarantee. NOW THEREFORE we hereby affirm that we are the guarantors and responsible to OREDA on behalf of the Successful Bidder for an amount up to a total of INR [Amount of the Bank Guarantee in words] ([Indian Rupees in figures]) only and we undertake to pay OREDA upon OREDA's first written demand declaring the Successful Bidder to be in default under the various provisions of the Bidding Document and/ or the Work Order to be issued by OREDA and without cavil or argument, any sum or sums within the limits of the amount of Bank Guarantee, as aforesaid, without OREDA's need to prove or to show grounds or reasons for the demand or the sum specified therein. We hereby waive the necessity of your demanding of the said demand from the Successful Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Bidding Document and/ or the Work Order to be issued by OREDA to be performed thereunder or any of the contract documents which may be made between you and the Successful Bidder shall in any way release us from any liability under this Bank Guarantee and we hereby waive notice of any such change, addition or modification.

This Bank Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the issuing bank.

This Bank Guarantee shall be a primary obligation of the issuing bank and accordingly OREDA shall not be obliged before enforcing this Bank Guarantee to take any action in any court or arbitral proceedings against the Successful Bidder, to make any claim against or any demand on the Successful Bidder or to give any notice to the Successful Bidder or to enforce any security held by OREDA or to exercise, levy or enforce any distress, diligence or other processes against the Successful Bidder.

This Bank Guarantee shall be interpreted in accordance with the laws of India and the courts at Bhubaneswar, Odisha shall have exclusive jurisdiction.

This Bank Guarantee shall be effective only when the Bank Guarantee is issued to the account holder "Orissa Renewable Energy Development Agency" in the bank and branch "Axis Bank Ltd., Mancheswar Branch, Bhubaneswar" having the account no. 918010103435005 IFSC code UTIB0001973.

Notwithstanding anything contained herein above our liability under this guarantee is restricted to INR [insert] (Indian Rupees [in words]) only and it shall remain with an expiry date up to [DD MMM YYYY, [insert] months from the original last date of submission of Bid] with a claim date up to [DD MMM YYYY, 12 months from the date of expiry] and shall be extended from time to time for such period, as may be desired by M/s. [insert the Successful Bidder name] whose behalf this guarantee has been given.

Our branch at [Name and address of the branch] is liable to pay the guaranteed amount depending on the filing of the claim and any part thereof under this Bank Guarantee only and only if you serve upon us at our [Name and address of the branch] branch a written claim or demand and received by us at our [Name and address of the branch] branch, otherwise the bank shall be discharged of all liabilities under this guarantee thereafter.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on [DD MMM YYYY] at [insert location of signing].

(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, name and address of the Bank and address of the Branch Power
of attorney no.:
WITNESSES

Signature:	Signature
Name:	Name:
Address:	Address:

Note:

- 1. This Bank Guarantee format is prepared in line with the Annexure-II of Finance Department Office Memorandum 4939 dated 13 Feb 2012, Govt of Odisha [Ref Para 22(i1].
- 2. Please ensure that each page of the Bank Guarantee is duly signed by the authorized signatory of the issuing bank and stamp of the issuing bank is affixed thereon.
- 3. Please ensure whether the last page is signed with full particulars including two witnesses under the seal of Bank as required in the prescribed format.
- 4. Please ensure that the date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of the stamp paper under the signature of the stamp vendor. The date of purchase of stamp paper shall be not later than the date of execution of the Bank Guarantee.
- 5. In case of any overwriting, cutting, etc. on the Bank Guarantee have been properly authenticated under signature and seal of the authorized office of the issuing bank.

7.3.3. LOI Form 3 (Sample format for CMC)

Sample format for Comprehensive Maintenance Contract (CMC)

CMC ref no: [insert]
Date: [DD MMM YYYY]

Sub: CMC for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emissionalong with Comprehensive Maintenance for Two (02) years.

Ref:

- 1. NIT no. [insert] dated [DD MMM YYYY]
- 2. Letter of Intent no. [insert] dated [DD MMM YYYY]
- 3. Work Order no. [insert] dated [DD MMM YYYY]

The Comprehensive Maintenance Contract (CMC) is signed jointly between the two (2) Parties on this [insert] day of [insert] month in the year [insert] at Bhubaneswar, Odisha and shall come into force from the date of its signing.

CMC for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emission along with Comprehensive Maintenance for Two (02) years This CMC is executed between Odisha Renewable Energy Development Agency (OREDA) having registered office at S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha, hereinafter called as the First Party and M/s [insert the name of the Successful Bidder] having registered office at [insert address of the Successful Bidder] hereinafter called as Second Party, for the maintenance of the Project for a period of five (5) years from the date of Commissioning of the Project, provided herein:

No of location	Cumulative capacity of zero emission solar boats	Cumulative no. of retrofitted boats
[insert]	[insert]	[insert]

The Second Party will maintain the Project as per the terms and conditions mentioned hereunder:

- 1. It has been envisaged in the Work Order under Article [insert] that the Project shall be warranted against any manufacturing defect and bad workmanship during the CMC Period of Two (02) years from the date of Commissioning of the Project. As these Projects have been Commissioned after issuance of a Commissioning Certificate. Hence, the Second Party is fully responsible for their trouble-free maintenance and the Second Party is liable to rectify/ remove any defect noticed within the aforesaid CMC Period, free of cost.
- 2. The Second Party will impart training to at least two (2) designated persons from the organization to be able to provide first aid repair service for the SPV systems.
- 3. The Performance Security has been submitted only in the form of the Bank Guarantee and the Bank Guarantees were issued in favour of Chief Executive, OREDA payable at Bhubaneswar, Odisha for an amount, expiry date and claim date as mentioned below:

The Performance Security has been submitted for an aggregate amount equivalent to ten percent (3%) of the Initial Capex in five (5) parts, as given below:

BG no.	Amount	Expiry date	Claim date
BG 1	Five percent (5%) of	Twenty (18) Months from the date	Twelve (12) Months from the
	Initial Capex	of issuing Letter of Intent	date of expiry
BG 2	Five percent (5%) of	Thirty (30) Months from the date of	Twelve (12) Months from the
	Initial Capex	issuing Letter of Intent	date of expiry

Each Bank Guarantee submitted towards the Performance Security shall be returned within a maximum period of thirty (30) Days of the expiry date of each of the BG.

- 4. The CMC includes repair/ replacement of all spares, consumable and all the Equipment including but not limited to solar photovoltaic module, inverter, battery, zero emission solar boat, BMS and balance of systems during the CMC Period.
- 5. The Second Party shall establish a central office at Bhubaneswar, Odisha, and establish local offices at the concerned district so as to deliver uninterrupted and sustainable Comprehensive Maintenance during the CMC Period duly headed by a Service Engineer.
- 6. The Second Party shall undertake corrective maintenance upon registration of complaints by consumers at
 - CRC-OREDA. After attending to the defect, the Second Party shall upload the required documents at ReSolve mobile application for successful closure of the complaints. The Second Party shall ensure rectification of defects and restore functionality within seven (7) Days of lodging the complaints.
- 7. The Second Party shall undertake scheduled maintenance work as per the prescribed format attached in Annexure Clause 7.5.7 and 7.6.7 and upload the required details and documents in the ReSolve mobile application strictly according to the given schedule.
- 8. The Second Party shall apprise the First Party about the requirements and supply of spares during warranty as well as CMC Period.
- 9. Annual report from CRC-OREDA shall be considered as a token of verification of maintenance done and release of an annual payment of CMC in arrears upon completion of each year of the CMC Period.
- 10. It will be the liberty of the First Party to crosscheck the systems maintained by the Second Party. Random verification of the maintenance may be carried out by the First Party wherever necessary.
- 11. The Second Party may continue to maintain the gadgets after the expiry of the CMC Period of ten (10) years from the date of Commissioning of the Project, provided the Department/ First Party desires.
- 12. For the adjudication of any dispute between the two (2) Parties arising on the execution of this CMC, the matter shall first be brought to the notice of Chief Executive, OREDA.
- 13. In case there will be no amicable settlement of the issues, the matter can be referred to the court of law having jurisdiction at Bhubaneswar, Bhubaneswar only.

For and on behalf of Odisha Renewable Energy Development Agency (First Party),

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory of OREDA: [insert name]

Designation: [insert designation]

Odisha Renewable Energy Development Agency

Seal: [insert seal of the Bidder]

For and on behalf of M/s (Second Party)

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity name]

7.4. Pre-bid Form

Pre-bid queries

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

То

The Chief Executive

Odisha Renewable Energy Development Agency (OREDA)

Address: S-3/59, Mancheswar Industrial Estate, Bhubaneswar - 751010, Odisha. Email:

ceoreda@oredaorissa.com

Sub: Submission of pre-bid queries for Design, Engineering, Manufacturing, Supply, Transportation, Deployment of FRP solar electric boats, with zero emissionalong with Comprehensive Maintenance for Two (02) years.

We are pleased to submit the following pre-bid queries:

SI. No.	Clause	Page	Clause	Clarification sought	Rationale
	no.	no.			
1					
2					
3					
4					
5					

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.5. Appendix to SOW -

7.5.1.Appendix Form (SPECIFICATION FOR 20 PAX ZERO EMISSION SOLAR BOAT)

7.5.1.1. GENERAL REQUIREMENTS

The zero emission solar boat shall be designed and built as a FRP catamaran solar powered boat with 20 passenger capacity intended for operation in the Chilika Lake region. The overall design and construction of the zero emission solar boat shall be such as to maximize the utilization of solar energy and propulsive efficiency and to ensure passenger safety and comfort.

Main Particulars

Type : Catamaran Length : 9.00-10.00Mtrs. Width : 3.2-3.5Mtrs.

Depth:1.1-1.3 mtrs

Speed (Cruise) : 6 knots

Speed (Max) : 8 Knots

Passenger Capacity : 20 Pax + 2 Crew
Duration of Operation : at least 8 hours/ day
Propulsion Battery : LiFePo4 battery chemistry

Electric Motor : Outboard Electric Motor (as per requirement)

Solar Panels : as per requirement

Min distance with full charge: : 40 km/ day

Min no of trips in a day : 3
Maximum number of trip: :5

Battery Capacity : as per requirement

Classification: IRS or any IACS member Classification Society

Frame Spacing: As per Classification Society rules

- I. Construction: The zero emission solar boat shall be built as a FRP catamaran boat with FRP cross structure of adequate strength.
- II. Subdivision: The zero emission solar boat hull shall be subdivided into watertight compartments by means of transverse watertight bulkheads.
- III. Trim and Stability: The zero-emission solar boat shall be designed and built to have adequate intact and damage stability, in all normal conditions of loading. An inclining experiment shall be conducted when the zero-emission solar boat is complete in all respects in the presence of the authorized representatives of OREDA/ the Owner. A trim and stability information booklet prepared by a qualified NavalArchitect and duly approved by statutory authorities shall be submitted to OREDA and the Owner prior to handing over of the zero-emission solar boat.

7.5.1.2. HULL STRUCTURE

7.5.1.2.1. Coating

Marine grade Isophthalic gel coat should be used for the exterior coating to the hull. Anti-fouling paint will be applied to prevent the fouling in the hull. Additional aesthetic painting for better appearance above waterline.

7.5.1.2.2. Decks

The main deck is transversely framed with no camber and no sheer. It shall be of sandwich core construction. The coach roof shall be sufficiently cambered to allow easy drainage of rainwater. The coach roof is adequately strengthened to support the weight of the solar panels and their accessories.

7.5.1.3. HULL OUTFIT AND DECK EQUIPMENT

- a) Mast: A small mast is provided forward on the coach roof for fitting the navigational lights.
- **b)** Hull Openings, Hatches & Manholes: Each compartment within the hull shall be provided with watertight hatches/manholes of standard dimensions. All doors should have adequate sill height complying with statutory requirements.
- **c) Mooring Arrangement:**Cleats of suitable size and quantity should be provided on the deck. Mooring lines made of synthetic fibre of adequate breaking strength to be provided.
- d) Steering Gear: Electric steering mechanism should be fitted to prevent the use of hydraulic oil in boat.
- e) Life Saving Appliances: Lifesaving appliances shall be supplied and installed in accordance with regulation.
- **f)** Fire Fighting Equipment: Firefighting equipment shall supply and installed in accordance with regulations.
- **g)** Coach Roof and Covers: A rigid FRP coach roof of good marine quality and aesthetic design shall be fitted above the main deck, giving adequate protection from sun and rain to the passengers on main deck.
- **h)** Railings: Steel railings of a minimum m height, supported by stanchions should be provided all around the open areas of main deck.
- *i)* **Navigation Lights, Shapes and Sound Signals**: Navigation Lights, Shapes should be provided in accordance with the rule requirement.
- *j)* **Windows for water splash protection:**A window of suitable size should be provided to safeguard passengers from the rainwater or water splash..

7.5.1.4. PASSENGER AREA ACCOMMODATION

All the surfaces of passenger accommodation and wheelhouse shall be made of good quality marine grade laminates with aesthetically pleasing colours and design as approved by owner.

7.5.1.4.1.1. Passenger Seating

The seating arrangement should be provided for 20 passengers. There should be a separate seat for the boat operator. The seating arrangement should be racing forward. Good quality seating arrangement dimensions, quality, and legroom seats should be provided to ensure maximum passenger comfort. The dimensions, quality, and legroom shall ensure a comfortable ride for the passengers.

7.5.1.4.1.2. Passenger Area

Passenger areas need to be covered with windows provided with transparent sliding window overs for protection against sun and rain. Windows when rolled down should provide visibility to passengers. Good quality LED TV should be in the passenger area and good quality LED lighting should be provided in the passenger area and wheel house. Good quality toilets are to be provided for the crew and passengers.

7.5.1.4.1.3. Flooring

Light weight, anti-skid, durable flooring should be provided in the passenger areas including open decks.

7.5.1.4.1.4. Passenger Access

For passenger embarkation and disembarkation doors should be provided on both port and starboard side **7.5.1.4.2. NAVIGATIONAL CONSOLE**

The wheelhouse navigational console should have following.

- Electric horn
- GPS
- Instrument console with performance indicators

7.5.1.5. PROPULSION SYSTEM

7.5.1.5.1. Propulsion Motors

The zero emission solar boat shall be equipped withsufficient electric propulsion systemto achieve the existing speed and continuous smooth running. The electric motor should be air-cooled, reliable, light weight with high efficiency. The electric motor should have warranty for at least 5 years.

7.5.1.5.2. Remote Control

The propulsion motors shall be operated by remote control from the wheelhouse, capable of changing the rpm and direction of rotation.

7.5.1.5.3. ENERGY PRODUCTION & STORAGE

7.5.1.5.3.1. Solar Panels

The total solar PV array capacity should not be less than allocated capacity and should comprise of solar crystalline / Mono PERC modules of minimum 350 Wp and above wattage. Module capacity less than minimum 350 watts shall not be accepted. The panels should satisfy below IEC ratings

- IEC 61215 / IS 14286
- IEC 61701 for Salt Mist Corrosion Testing
- In addition, PV modules must qualify to IEC 61730 for safety qualification testing @1000 V DC or higher.

7.5.1.5.3.2. Battery Bank

Appropriate size of Battery Bank of lithium-iron-phosphate type batteries suitable for marine application shall be provided as an energy storage medium to meet the energy deficiency in cloudy conditions to operate the boat for minimum 8 hours duration at a speed of 6-8 knots/hour. Two independent battery banks should be provided in the battery compartment within each demi hull. Batteries should have a minimum three-year warranty Batteries. Batteries should have the following test certificates

IEC standard d2133:2012.

IEC62281 Safety of primary and secondary lithium cells and batteries during transport Edition: 2.0 (2014-02-01)

Ingress protection standard IP 65.

Battery space redundancy and segregation

- Battery space shall be accessible for replacement of parts of the system.
- Battery spaces shall provide protection against external hazards (e.g. fire, mechanical impact).
- Walls and structures surrounding the battery shall be built to protect the vessel against fire and explosion risks

Battery system

- Shall demonstrate robustness for long term exposure in a marine environment (temperature, moisture, list, trim, roll, etc.).
- Shall be maintainable such that defect parts can be substituted safely and effectively.
 Competence, technical and process requirements shall be identified.

7.5.1.5.3.3. Battery Management System

- To ensure safety and long life of the batteries, a dedicated battery management system shall be provided. The system shall include cut-offs when the batteries are fully charged and when its discharge exceeds a specified limit.
- The BMS shall communicate critical battery parameters.

- The BMS shall ensure that the battery operates in the safe operating window of the cells.
- SOC and SOH shall be monitored.
- There shall be alarms and shutdown functions on several levels.
- Important battery parameters shall be logged and stored in a non-volatile memory.
- Earthing of batteries: isolated system is recommended (isolated positive and negative terminals).
- If the battery system is equipped with a remote logging/diagnostic system, it should be protected sufficiently against intrusion.
- A maintenance and operational plan including emergency operation shall be established.

7.4 Shore Charging System

A suitable shore charging system will be provided to charge the battery using AC power from grid and generator.

7.5.1.5.4. Warranty:

- Boat warranty: 1 year
- Manufacturer's warranty for individual machinery/equipment:
 - Batteries: 3years or 50000 km whichever is earlier
 - Solar panels performance warranty: 25years;
 - · Solar charge controller: 1 year
 - · Electric Motor warranty: 2 years

7.5.1.5.5. ARRAY/MODULE MOUNTING STRUCTURE:

Module Mounting Structure (MMS)

- a) Supply, installation, deployment, and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries, and spare part.
- b) Module mounting structures can be made from three types of materials. They are Hot Dip Galvanized Iron, Aluminium and Hot Dip Galvanized Mild Steel (MS). However, MS will be preferred for raised structure.
- c) MMS Steel shall be as per latest IS 2062:2011 and galvanization of the mounting structure shall be in compliance with latest IS 4759. MMS Aluminium shall be as per AA6063 T6. For Aluminium structures, necessary protection towards rusting needs to be provided either by coating or anodization.
- d) All bolts, nuts, fasteners shall be of stainless steel of grade SS 304 or hot dip galvanized, panel mounting clamps shall be of aluminium and must sustain the adverse climatic conditions.
- e) Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts, and bolts
- f) The module mounting structures should have angle of inclination as per the boat conditions to take maximum insolation and complete shadow-free operation during generation hours. However, to accommodate more capacity the angle of inclination may be reduced until the plant meets the specified performance ratio requirements.
- g) The Mounting structure shall be so designed to withstand the speed for the wind zone during the movement of the boat in the Chilka lake region. The PV array structure design shall be appropriate with a factor of safety of minimum 1.5.
- h) Suitable fastening arrangements and clamping should be provided to secure the installation against the specific wind speed.
- i) The structures shall be designed to allow easy replacement, repairing and cleaning of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels.

7.5.2. Appendix Form 2 (Drawings & Certificates)

All the drawings & designs of the Boats shall be provided by the supplier as per approved Naval Architect/ Naval Consultant or other competent agencies. The builder should submit construction as required as IRS/MMD or other competent agencies for approval and two copies to the owner. The following drawings and calculation should be sent to the owner.

- i) General arrangement
- ii) Lines Plan
- iii) Hull structure
- iv) Fire fitting appliances
- v) Life savingequipments
- vi) Navigational equipments
- vii) GPS details
- viii) Tanks
- ix) Electrical machineries, equipment and ancillary layout
- x) Electrical wiring
- xi) Calibration chart
- xii) Docking plan
- xiii) Hydrostatic drawings
- xiv) Cross curves of stability
- xv) Scantling calculations
- xvi) Mid ship drawing
- xvii)Lay out of Wheel House.

The following certificates shall be submitted to at the time of delivery of the boat

- 1) Builder's Test Certificate.
- 2) Stability Report
- 3) Completion & Trial Certificate from Naval Architect
- 4) Manufacturer's warranty for the Main Engine.

7.5.3. Appendix Form 3 (Spares)

The Successful Bidder shall maintain, all the time, the following spares for ZERO EMISSION SOLAR BOAT and as mentioned below:

Name of the Spares	Technical Specification	Unit	Total quantum requirement in no.
Solar photovoltaic modules @ 2% of the total capacity	As per the Technical Specification of the NIT	W	roquiromoni in noi
Inverter and Battery (higher capacity as per the various ZERO EMISSION SOLAR BOAT capacities to be allocated)	As per the Technical Specification of the NIT	No.	

In case of any non-compliance, OREDA will take necessary action against the Bidder. Please note that the Spares shall be maintained at the central/ local offices set by the Bidders.

7.5.4. Appendix Form 4 Commissioning Report)

The Commissioning Report shall essentially capture the health of the Project at the time of Commissioning along with the various observations which will be captured in accordance with the Applicable Law and Prudent Utility Practices prevailing in Odisha and any general practices followed in the solar industry. The Commissioning Committee will prepare the Commissioning Report. In addition, the OREDA will provide the compliance report as per CRC procedures and this shall be referred along with the Commissioning Report for the issuance of Joint Commissioning Certificate.

The sample Commissioning Report is represented below:

Commissioning Report - Zero emission solar boat

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY] Reference:

- a) NIT no. [insert] dated [DD MMM YYYY]
- b) Letter of Intent no. [insert] dated [DD MMM YYYY] 3. Work Order no. [insert] dated [DD MMM YYYY]
- c) Any other correspondence, if any:

This Commissioning Report is prepared for the Bidder [insert name of Bidder] for the Project developed at [insert] village of [insert] block at [insert] district of Odisha.

The Project details of ZERO EMISSION SOLAR BOAT are given below:

SI. No.	Items	Details
1.	Name of the LOCATION	
2.	Address	
3.	Capacity of the ZERO EMISSION SOLAR BOAT	
4.	CMC manual	(Yes/No)
5.	Dos & Don'ts in the form of a booklet	(Yes/No)
6.	Proof of conducting lake trial	(Yes/No)
7.	Proof of conducting the training programs	(Yes/No)

Tests performed during Commissioning:

SI. No.	Test (in last 30 days)	Result
1.	Cruise Speed(Regular)	
2.	Cruise Speed (Max)	
8.	Visual Inspection	
9.	Lake trial	

The above plant was commissioned as per applicable guidelines and the tests performed suggest that the performance of the above plant is satisfactory.

Place: [insert place] [sign here]

Signature

Name of Authorized Representative of OREDA: [insert

name

Designation: [insert designation]

Odisha Renewable Energy Development Agency (OREDA)

Seal:

Place: [insert place] [sign here]

Signature

Name of Authorized Representative of DISCOM: [insert

name]

Designation: [insert designation]

[DISCOM Name]

Seal:

Place: [insert place] [sign here]

Signature

Name of Authorized Representative of DRDA: [insert name]

Designation: [insert designation]

District Rural Development Agency (DRDA)

Seal:

7.5.5.Appendix Form 5 (Joint Commissioning/Recommissioning Certificate)

Joint Commissioning Certificate of the zero emission solar boat project

(To be issued by OREDA on the letterhead)

TO WHOMSOEVER IT MAY CONCERN

Ref. no.: [insert]

Date: [DD MMM YYYY]

То

[Successful Bidder's name] [Address] [Email id]

Reference:

[Mobile no.]

- a) NIT no. [insert] dated [DD MMM YYYY]
- b) Letter of Intent no. [insert] dated [DD MMM YYYY] 3. Work Order no. [insert] dated [DD MMM YYYY]
- c) Any other correspondence, if any:

This is to certify that [Name of the Successful Bidder] having its registered office at [address] has successfully commissioned/recommissioned capacity of [insert capacity] pax with [....] kWZero emission solar boat Project at [insert village name] village, [insert district name] District in Odisha.

The Joint Commissioning Certificate is issued on the basis of the following documents enclosed:

- a) Commissioning Report as submitted by Commissioning Committee
- Installation report as uploaded on CRC created using the ReSolve Mobile App only 3. No claim/ lien certificate

Place: [insert place] [sign here]

Signature

Name of Authorized Representative of OREDA: [insert name]

Designation: [insert designation]

Odisha Renewable Energy Development Agency

Seal:

7.5.6.Appendix Form 6 (Acceptance Certificate) Acceptance Certificate of the zero emission solar boat Project

(To be issued by OREDA on the letterhead)

TO WHOMSOEVER IT MAY CONCERN

Date: [DD MMM YYYY]

To

[Successful Bidder's name]
[Address]
[Email id]
[Mobile no.]

Reference:

- a) NIT no. [insert] dated [DD MMM YYYY]
- b) Letter of Intent no. [insert] dated [DD MMM YYYY]
- c) Work Order no. [insert] dated [DD MMM YYYY]
- d) Joint Commissioning Certificate no. [insert] dated [DD MMM YYYY]
- e) Any other correspondence, if any:

This is to certify that [Name of the Successful Bidder] having its registered office at [address] has successfully commissioned capacity of [insert capacity] Zero emission solar boat Project at [insert village name] village, [insert district name] District in Odisha with respect to the ref. no. 5 and it is operating successfully for a period of ninety (90) Days from the date of the Joint Commissioning Certificate.

The Acceptance Certificate has been issued on the basis of the following documents enclosed:

f) Acceptance Report as submitted by the Commissioning Committee prepared in line with Commissioning

Report

- g) Closure report as uploaded on CRC
- h) No claim/ lien certificate

Place: [insert place]

[sign here]

Signature

Name of Authorized Representative of OREDA: [insert name]

Designation: [insert designation]

Odisha Renewable Energy Development Agency

Seal:

7.5.8. **Appendix Form 8 (Test Certificates – IEC and IP certifications)** The Test Certificate requirements for ZERO EMISSION SOLAR BOAT are given below:

SI. No.	Major Component	Test Certificates Required	Test description	Designated Test Labs
1	Crystalline Silicon Terrestrial PV	IEC 61215	Design qualification	MNRE/NABL/BIS authorized Test Lab
	Modules	IEC 61730	Safety Qualification	MNRE/NABL/BIS authorized Test Lab
		IEC 61701	Salt Mist Corrosion Test	MNRE/NABL/BIS authorized Test Lab
2	Power Conditioning Units (PCU)/	IEC 61683	Efficiency Test	MNRE/NABL/BIS authorized Test Lab
	Inverter*	IEC 60068	Environmental Test	MNRE/NABL/BIS authorized Test Lab
		IEC 62116	Anti-Islanding Protection	MNRE/NABL/BIS authorized Test Lab
		IEC 61727	Grid Interconnection	MNRE/NABL/BIS authorized Test Labs
		IP 21	Ingress Protection for Outdoor/Indoor Enclosure	MNRE/NABL/BIS authorized Test Lab
3	Battery (LifePO4)	IS 15549 - 2005	As per IS 15549/ IEC 61427	MNRE/NABL/BIS authorized Test Lab

^{*}Self-certified Test reports of PCU may be submitted for capacities above 10 kW

7.5.6. Appendix Form 7 (Scheduled Maintenance):

The periodic Scheduled Maintenance protocol for the Project is given below:

Basic maintenance

The following steps are to be followed for general maintenance routine of the zero emission solar boat for its safe and efficient operation.

Housekeeping control.

Regularly check battery voltage and state of charge after each round trip.

- a) Checkbatterytemperature.
- b) Check the functioning of thermal management system of the propulsion motor while the motor is running.
- c) Remove and refill gear oil from OBM propeller hub.
- d) Open the motor cover regularly to see if there is any leakage.
- e) Boost charge all battery banks once in every two weeks.
- f) Make sure every electrical connection is tight and free of rusting.

Battery maintenance

- a) Thefollowingstepsaretobefollowedforthemaintenanceroutineofthebatteries.
- b) Regularly check if the battery terminals are properly tight and free of rust.
- c) Clean the battery compartment once in every week.
- d) Load the battery and check if any of the batteries showing undervoltage.
- e) Check if any of the batteries are overheating.
- f) Check for bulging in batteries. If any of the batteries are bulged and/or showing undervoltage replace immediately.
- g) Apply anti-corrosive gel on all battery terminals.
- h) Make sure the battery compartment is free from rodent infestation.

Quarterly maintenance schedule for electric zero emission solar boats

The following procedures have to be carried out during the quarterly maintenance schedule of the electric propulsion.

Systemofazero emission solar boat:

- 1. Inspection of batteries
 - a) ChecktheStateofChargeofeachbattery.
 - b) ChecktheStateofHealthofeachbattery.
 - $c) \quad Check the charging and discharging of each battery. \\$
- 2. InspectionandmaintenanceofElectricPropulsionMotor
 - a) Inspecttheterminals, connectors, and fuses, and replace if necessary.
 - b) Inspectthemotorcoolingsystemandreplaceanyfaultycomponentsifnecessary.
 - c) Replacethetransmissionoil.
- 3. Inspecttheperformanceparametersofsolarpanelsifinstalled.
- 4. Inspecttheperformanceparametersofinvertersifinstalled.
- 5. Inspectthevoltagelevelandhealthofauxiliarybatteriesifinstalled.
- 6. Inspecttheoperationofthrottlesandcontrollers.
- 7. Inspectallthecablesandconnectors, makesure that all connections are tight and free of rusting.

Items	Operations	lni	tial		Every	
		10 hours 1 month	50 hours 3 month s	50 hours 3 months	100 hours 6 months	200 hours 1 Year
Anode (s) (External)	Check/Replacement		•/0		•/0	
Anode (s) (Internal)	Check/Replacement					0
Cooling water passages	Cleaning		•		•	
Cowing clamp	Check					•
Gear oil - Grade 2	Change	•			•	
Greasing points	Greasing		•	•		
Propeller and cotter pin	Check/Replacement		•		•	
Shift link/shift cable	Check/Adjustment					0
Throttle link/throttle cable/throttle pick-up timing	Check/Adjustment					0
water pump	Check					0
Impeller	Check/Replacement				•/0	
The "●" symbol indicates the o	check-ups which you may ca	arry out by	yourself.			
The "o" symbol indicates work dealer.			المعطم معان		alaan aft	
NOTE: When operating in salt	iwater, turbid or muddy wate	er,inen eng	ine snouic	i be ilushed	ciean aiter	every

7.5.7. Appendix Form 8 (Test Certificates - IEC and IP certifications)

The Test Certificate requirements for the Project are given below:

SI. No.	Major Component	Test Certificates Required	Test description	Designated Test Labs
1	Crystalline Silicon Terrestrial PV Modules	IEC 61215	Design qualification	MNRE/NABL/BIS authorized Test Lab
		IEC 61730	Safety Qualification	MNRE/NABL/BIS authorized Test Lab
		IEC 61701	Salt Mist Corrosion Test	MNRE/NABL/BIS authorized Test Lab
2	Battery (LiFePO4)	IS16046- 2015/IEC 62133- 2012	Standard for LiFePO4 battery	MNRE/NABL/BIS authorized Test Lab

Note: The proof of all documents showcasing the possession of such copies of the Test Certificates by the Bidder shall be submitted along with bid document.

use.

7.6. Appendix to SOW – CRC guidelines

7.6.1.Disclaimer

- These guidelines meant for use of OREDA only.
- These guidelines are prescribed for installation, Commissioning, Acceptance and
- Comprehensive Maintenance of renewable energy systems installed by/under OREDA only.
- OREDA does neither recommend nor insist other organizations to follow these guidelines for the renewable energy systems developed by either by themselves or through any other organization other than OREDA.
- OREDA reserves all the right to modify, amend or supplement these guidelines whenever such necessity arises.
- Though adequate care has been taken for preparation of these guidelines the installation and
- maintenance details prescribed in this document are not the only and absolute prescriptions. Depending upon the on-site conditions, the installation/maintenance technician shall take his/her own well-judged decision while installing or maintaining a given RE system.
- Though safety features have not been covered under these guidelines, Indian standard safety guidelines for construction work and electrical works must be followed by all involved in with installation and maintenance of RE systems under these guidelines.

7.6.2. Declaration

- These guidelines will hereinafter be known as "General Guidelines for Installation and Maintenance of RE Systems under OREDA"
- These guidelines shall be applicable to all distributed RE systems installed under the aegis of OREDA.
- These guidelines shall be strictly followed by all vendors of OREDA.
- These guidelines will also be strictly adhered to by all technicians and supervisory level officers of OREDA.
- These guidelines will also constitute an integral part of all tenders of OREDA
- The scoring system prescribed in these guidelines shall be applicable to all vendors of OREDA executing projects on behalf of OREDA

7.6.3. Intent behind framing these guidelines

• These guidelines have been framed solely with the intention of improving the installation standards of RE systems and to extend the quality and timely maintenance services so as to minimize system downtime and guarantee customers' satisfaction.

7.6.4. Context

- The last few years have witnessed a tremendous rise in the number of RE installation particularly in remote, un-served and underserved parts of the state. In view of the absolute need of these installations to meet the basic requirements such as lighting, the supply of drinking water, irrigating farmlands, etc. it is imperative on the part of OREDA to ensure proper performance of the systems which largely depends on the quality of materials, standards of installation and the certainty and frequency of maintenance.
- Ministry of New and Renewable Energy, GOI normally determines the quality and standards of the materials which are elaborately reiterated in the respective tender documents.
- Project-specific installation procedures are often elaborated in the respective tender documents which the vendors are expected to follow meticulously. However, it has been observed that the vendors often do not adhere to these procedures which results in poor performance of the systems. To enable the vendors to follow the procedures meticulously a specific installation App has been developed by OREDA which will be shared with the vendors on their registered mobiles meant to be used by their designated Technicians. The App has been made in such a way that as a technician proceeds for installation of a certain system/device it opens up the step by step installation procedure for the given system/device which the technicians simply has to follow and upload pictures wherever camera buttons have been provided. As a technician completes installation the entire installation report along with pictures will be ready on his mobile for submission to OREDA.
- Renewable Energy systems are known for their low maintenance needs. Often this is misconceived as
 "no-maintenance" which results in non-performance of such high value and efficient systems. Thus, all
 RE systems must be maintained well. When it comes to RE systems particularly solar PV systems with
 battery storage, maintenance assumes paramount importance because non-charging or less charging

of the batteries fast degrade the batteries rendering them totally unserviceable in a matter of few days. For example, when the PV panel of a street light accumulates dust, moisture, moss, etc. its power generating capacity reduces substantially resulting in low charging of the battery. On the other hand, the consumption of power from the battery increases substantially under such circumstances as the panel senses early dusk and late dawn. This results in shortening the battery cycles and ultimately the life span of the battery which constitutes almost 40% of the cost of the system. Thus effective maintenance must focus on certainty and regularity.

- Though the primary responsibility of maintenance of the systems has been vested in the concerned vendor the rising number of unresolved service requests at the CRC calls for some serious organizational oversight. Moreover, it is presumed that many customers are also not able to register their requests due to poor or no mobile connectivity, ignorance about CRC and its toll-free number, etc.
- Keeping the above in view, OREDA during September 2018 introduced a Scheduled Maintenance Regime through its Customer Relationship Centre so as to introduce periodicity and certainty in the maintenance services being extended by the vendors. Like installation, the scheduled maintenance has also been made a mobile application based where the technician responsible for maintenance of the system can step by step follow the prescribed procedure for scheduled maintenance and upload pictures wherever camera buttons have been provided. At the end of the maintenance procedure, a maintenance report can also be generated by the technicians.
- This initiative is not only expected to increase the performance level of the installations but also greatly reduce service requests by customers.

7.6.5. Objectives:

The primary objectives of this new initiative are

- a) Increase the economic life span of installations.
- b) Ensuring better performance of RE systems.
- c) Higher returns on investments.
- d) Higher customer satisfaction
- e) Better acceptance of decentralized RE based power systems
- f) Increased response to climate change mitigation.

7.6.6. Stakeholders:

Ensuring proper performance of RE installations calls for the combined effort of all stakeholders such as Customers, Sponsors, PRIs, Vendors, Independent Service Organizations, OEMs, and OREDA.

Customers:

Customers are the ultimate users and custodians of RE systems/devices. They are required to own the systems irrespective of the systems being privately owned by them or a public property installed inside their premises. They should be responsible for the safety and security of the systems as well as day-to-day maintenance of the systems as prescribed in the users' manual.

Sponsors

Sponsors are the Government Departments/Organizations sponsoring the schemes/program under which the RE systems/devices are installed. Sponsors are responsible for availing and extending maintenance contracts and organizing funds for the same. Sponsors are to be kept informed about the maintenance activities as well as emergent situations that call for material and financial resources.

Vendors

Vendors are primarily responsible for supply, installation, and commissioning of the RE systems/devices. They are also responsible for the effective maintenance of the systems for the first five years or as may be mentioned in the concerned tender. Vendors are required to extend scheduled maintenance services as well as on-call maintenance services to all systems installed by them. For extending such services smoothly they may establish their own service network or avail services of Independent Service Organizations. Vendors are also required to have back-to-back agreements with their OEMs for extending guarantee, warranty, the supply of spares, etc. Vendors shall work in close

coordination with the customers, custodians, field units, respective technical divisions, and CRC of OREDA in order to deliver effective maintenance services.

Original Equipment Manufacturers (OEMs)

The Manufacturers of the original equipment used in RE systems/devices are important stakeholders as far as delivery of effective maintenance services is concerned. Without a proper inventory of spares at their end for the entire period of maintenance and quick response to the need for spares at the project site, it is almost impossible to deliver effective maintenance services on the part of the vendors. Hence OEMs must enter into tripartite agreements with vendors as well as OREDA with regards to the adequacy and timely supply of spares. OREDA may also consider empaneling OEMs of important items such as pumps, invertors, CPUs, etc.

OREDA

OREDA represented by its Technical Divisions, Field Units, CRC is the most important stakeholders in respects of

- a) Managing processes and providing oversight
- b) Establishing principles and parameters for extending maintenance services
- c) Setting up performance parameters
- d) Monitoring, measuring and analyzing stakeholders' performance.
- e) Working for performance improvement
- f) Identifying time-bound and appropriate actions as well as working on the same
- g) Developing internal preparedness to repair, re-installing systems beyond the scope of the vendors.
- h) Developing contingency resources and plans to force majeure situations.
- i) Recognizing and encouraging good performance

7.6.7.Process

The overall process is hinged on three distinct sub-processes. They are

- I. Onboarding the project
- II. Installation & Commissioning of the systems
- III. Creation of system IDs and linking to CRM

The efficiency of maintenance is largely dependent on the quality and regularity of step 1,2&3. The processes are as follows:

7.6.7.1. ONBOARDING:

Onboarding refers to the creation of the project-specific database comprising of the following details. Onboarding of each project is to be done by the concerned Division Head of OREDA.

- I. Name of the scheme (Generic-Specific)
- II. Name of the sponsors.
- III. Details of sanction order indicating the quantity, cost, locations, etc.
- IV. Date of floating of tender
- V. Date of finalization of tenders.
- VI. Vendor details (name, the quantity of work awarded, the total cost of the work, locations assigned)

- VII. Date of Issue of LOI
- VIII. Details of survey report submitted by the vendor in response to LOI
 - IX. Details of project execution schedule submitted by the vendor in response to LOI
 - X. Date of issue of bidder work order vendor wise
- XI. Final date of completion of the project.

This would get populated onto the database in phases as the scheme progresses from conception to inception.

Once a scheme is on-boarded the details are to be intimated to CRC for the creation of a new account.

PROJECT EXECUTION: The vendor to whom a particular work has been assigned is responsible for the execution of the project. As soon as a project is on-boarded with the above details the same will appear on the dashboard of the concerned vendor(s). The vendor then has to assign the project to a specific technician(s) having registered mobile phones on which the installation apps have been loaded.

The technician will then be able to see his/her assigned projects on the app provided having details such as the name of the project, name of the customer, location details including GPS coordinates, the capacity of the project, etc. As the technician starts executing the project, he/she has to upload the following details as and when it happens

- a) Date of commencement
- b) Details of all hard wares
- c) Exact location of installation
- d) Complete step by step installation details including the picture as per the installation app.
- e) Date of commissioning the project

This would get populated onto the database in phases as the scheme progresses from conception to inception.

SUPERVISION:

- a) District Level: As soon as the on-boarding is complete the Officer-in-charge of the District RE Cell can see the details on his dashboard. Similarly, he can see the subsequent processes carried out at the vendor and technician levels. At any point in time as may be required the Officer-in-charge of the District RE Cell can undertake filed visits and supervise the progress of the work, quality of work execution, etc.
 - Once a project is commissioned the Officer-in-charge of District RE Cell can make necessary checks and upload the Joint Commissioning Certificate on the App provided to him within a stipulated timeline.
- b) HQR. Level: After getting the commissioning reports and necessary checks thereon the concerned division of OREDA will create the project/system ID after which the project/system will automatically get linked to the CRC which will mark the beginning of the processes at CRC such as Scheduled Maintenance and Corrective Maintenance.



7.6.8.R&M Management:

The R&M regime involves two types of efforts. The first is the Scheduled Maintenance Activities, which is done as a preventive action. It is expected that these periodic maintenances will drastically reduce the incidents of breakdowns. This should be done at some periodicity and in each case, a list of activities must be done. The second is the Unscheduled Maintenance Activities which are of corrective nature. This means when any breakdown/ malfunction is detected, the appropriate corrective action needed can be initiated.

7.8.9.1. Scheduled (Preventive) Maintenance:

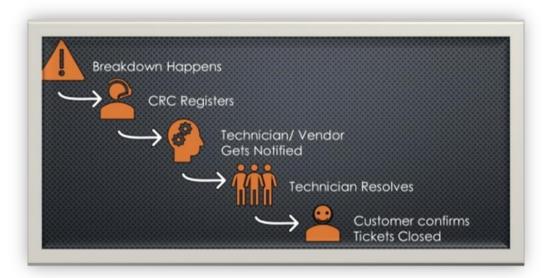
- a) A master maintenance schedule is to be drawn up for the organization covering each installation.
- b) This will be done by stratifying the districts into District Clusters based on logistical convenience.
- c) Each Cluster will be broken down into three geographical patches (comprising of Blocks/ GPs) called as Maintenance Cluster to evenly distribute the ticket load across each month within that Maintenance Cluster.
- d) The CRMS, well before the schedule, will fire a flurry of emails and SMS to the Vendors notifying about the list of installations they must cover in each of the Clusters within that Month. A ticket for each installation in the list will be automatically generated. It may be noted that though the list is sent in one list, separate emails will be sent for each ticket on which communication/ transactions have to be made by the Vendor
- e) It's the responsibility of the Vendors to track each case through their authorized technicians and report compliance throughout the month as soon as they cover the installations.
- f) The technicians/ SPOC of the vendor must share the documents/evidence required for the acceptance of resolution over e-mail in the same thread the ticket was raised. No resolution mail other than that thread will be accepted. The protocol of communication may get subsequently changed to improve operational efficiency.
- g) The CRC as soon as it receives the resolution mail, will cross verify the claim of resolution by the technicians and may close the ticket or return for rework.
- h) The CRMS at the end of the month will compute the performance of the ticket/ Vendor/ Scheme and release a scorecard.



7.8.9.2. Unscheduled (Corrective) Maintenance:

- a) Breakdown occurs at one of the installations.
- b) The customer calls the CRC to submit a service request.
- The agent at the CRC using the CRMS identifies the customer and registers a request called a ticket.
- d) Automatically a set of e-mails is fired to the Vendor, its Technician, Administering Dept. of the Scheme and OREDA.
- e) The CRMS tracks each ticket and follows up each case over e-mail and voice calls.

- f) After the lapse of certain days, the CRMS auto escalates it to the Nodal Officer/ Scheme Officer for action.
- g) The vendor/ Technician resolves the ticket at the field and intimates the CRC about it through the designated communication channel as per the protocol.
- h) CRC cross-verifies it with the community/ customer and closes the ticket.
- i) CRMS measures performance.



7.8.10. Repair and Maintenance Regime:

7.8.10.1. Scheduled Maintenance:

The schedule maintenance regime will focus on the vendor's **certainty and regularity** of visit to the installations under him as his performance parameter. He is expected to comply with a minimum of 90% visit against the Scheduled Tickets within that Service Month.

a) Activities under each category of Tickets:

- The vendor is warranted to visit the installations and undertake a list of activities linked to that category
 of ticket. The ticket category can be of Quarterly, Half Yearly and Annual. To know the installation of a
 Class-specific and ticket Category-specific list of activities, kindly refer to Appendix Clause 7.5.7 and
 Appendix Clause 7.6.7. b) Time Limit:
- It's expected that the vendor must complete the activities over the list of installations designated for that maintenance month within that calendar month itself.
- It may be noted that they can work on any day without any bias to the day being notified as a holiday or
 otherwise.

b) Route/ Sequence:

- Each installation must be visited once in every quarter, half-yearly and yearly for different categories of activities.
- To maintain a uniform gap between the visits every time, the vendor is expected to stick to an optimal sequence in a route.
- The number of routes that the vendor identifies depends on how big the list and how many technicians are to be deployed.
- Care must be taken so that all installations not only are resolved within a month but also are closed.

c) Score:

• On successful completion of one ticket as per the service standard, the vendor will earn certain points, and for each default, it will earn a negative score which is designed to be a deterrent.

The scores are:

Visits	Activity Types	Earnings	Penalties
Visit - 1	Q1	3	-9
	Q2	3	-9
Visit - 2	H1	1	-3
Visit - 3	Q3	3	-9
	Q4	3	-9
	H2	1	-3
Visit - 4	A1	1	-3

• Corrective Maintenance:

- a) Service Standards: While the Schedule Maintenance regime focuses on the vender's certainty and regularity of visit to the installation as his performance parameter, Corrective Maintenance Regime focuses on the Timeliness of the vendor to respond to a breakdown situation.
- b) The vendor upon being notified of a breakdown situation shall have to complete his assessment within 2 days and complete the repair work within the next 5 days. All (100%) tickets must be resolved within the time limit given above. If the scope of repair/ replacement is found to be beyond the scope of Maintenance Contract (MC), then the vendor immediately after the field reconnaissance must report the same to the CRC.
- It is expected that at any point in time, none of the vendors would be having cases older than 7 days pending in their list.
- d) And, no vendor's installations under a scheme should show 'NonWorking' status of more than 2% of the installations.

Methodology:

Corrective maintenance requires a different approach as against the scheduled maintenance methodology. While the scheduled maintenance is predictable, corrective maintenance requires a case-specific approach. The following are recommendations for the most efficient methodology. But the vendors are free to adopt their own if they are complying with the time limit.

Reconnaissance:

Within 2 days of the ticket date.

- I. When a request of service is registered, the vendor as the first response must organize the collection of field level information about the nature of the problem.
- II. Based on that feedback from the field, the vendor must decide the following:
 - i. The genuineness of the request,
 - ii. If the requirement of repair is beyond the scope of his MC,
 - iii. If it is within his scope, then, he must arrange labor, spares, materials needed for the repair, and mobilize them to attend the breakdown at the spot.

This will help the vendor to resolve the request in one visit. This is more necessary as at times the villagers without ascertaining the owner of the installation, register a request in the CRC, and, as there is the possibility of multiple installations in one village and the data matches, the ticket is raised against a working installation.

- Repair: Within 7 days of the ticket date.
 - The authorized technicians of the vendor must move to the location with the resources to undertake the repair.
 - b) Upon completion of the repair, the installations must be tested in the presence of the customer/ custodian.

- c) Requisite evidence and documentation must be completed by the technicians and immediate intimation need to be sent to the CRC.
- · How to handle repair beyond the scope of MC
 - i. At the reconnaissance stage, when the vendor realizes that the requirement is beyond the scope of MC, he must request closure giving appropriate reasons.
 - ii. He must use the same communication channel as he would have used

b) for resolution,

- i. The CRC then would take it off the Vendor list and transfer it to the OREDA list.
- ii. OREDA will take this matter up with their principals for resolution.

Score:

- Each vendor at the start will be given a Credit account of 8760 hrs (365 Days x 24 hrs.) for each of the installation he is responsible for maintenance. That will be known as the 'Total Achievable Uptime'.
- When a request for service gets registered at the CRC the clock is started from the next day. The day the Vendor responds to a ticket informing successful resolution, the Clock stops on that day.
- At the end of a period, the time taken for each ticket for a resolution, which is converted into hours gets deducted from the 'Total Attainable Uptime' of that Ticket.
- And if the resolution time exceeds the set time of '7 Days', the system will treat those additional days with twice the score.
- The system is so designed that the lesser the time is taken to resolve, the higher will be his Net Score. More he takes time to resolve; higher will be his penalty score which may erode his other good works.

7.7.10. Implementation:

- a) Training and Orientation: OREDA will conduct orientation and training sessions for the Vendors and their technicians
- b) Helpdesk: OREDA CRC will provide support to the field personnel of the vendors to acquaint themselves with various communication and process protocol.
- c) Performance Evaluation: The following paragraphs explain the way OREDA will evaluate both the performances and how it will turn it into a composite score of performance. The Scheduled Maintenance activities have been given primacy over the Corrective Maintenance activities. While the Scheduled Maintenance is given 80% weightage in the composite score, Corrective Maintenance is given 20%.
- d) Computation of performance: Examples from the shared Excel sheets may be incorporated.
- e) Rewards and Recognitions: OREDA will do everything under its might to support the good performance of the vendors as achieving very high uptime of its installation and good customer relationship is its prime organizational focus. It also will weed out non-performing vendors by penalizing them for their bad performance and blacklisting them for good.
- f) OREDA will.
 - i. Give preference to the high performing vendors in the upcoming tenders.
 - ii. Institute Awards and Recognition during important days of OREDA
 - iii. Recover Liquidated Damages in the shape of penalties
 - iv. Blacklist vendors whose past performances are not at all good

7.7. No claim/ lien certificate

No claim/ lien certificate

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

We, the undersigned, certify that we are free and clear from any and all claims, liens, security interest, encumbrances, unpaid vendors'/ suppliers' lien or otherwise, arising out of or in connection to the performance of the Work Order no. [insert] dated [DD MMM YYYY]

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity

7.8. Format for Maintenance Experience

Status of receipt and redressal of Corrective Maintenance

(To be submitted on the letterhead of the Bidder)

Date: [DD MMM YYYY]

NIT no.: [insert NIT no.] dated [DD MMM YYYY]

- Name of the Vendor:
- Total No. of boats supplied in India:
- Total No. of boats presently in functional mode:
- % of Functionality:
- Total No. of Service Request / Maintenance Call received against all:

Total No. of Service Request / Maintenance case resolved:

Place: [insert place] [sign here]

Signature

Name of Authorized Signatory: [insert name]

Designation: [insert designation]

Name of the Bidder: [insert Bidder's legal entity name]

7.9. JV agreement

JV Agreement

(To be submitted on a non-judicial stamp paper of appropriate value as per The Indian Stamp Act,1899 relevant to the place of execution. The stamp paper shall be purchased in the name of the Lead Member only.)

Signature and stamp of the notary of the place of execution [insert place] dated [DD MMM YYYY]

Date: [DD MMM YYYY]

RFP No.: [insert RFP No.] dated [DD MMM YYYY]

Ref. No. [insertLoA no. for intimation on being a Successful Bidder] dated [DD MMM YYYY]

This [JV] Agreement is entered into on this [DD] day of [MMM] month, year [YYYY]

Amongst

[Name of the Lead Member] incorporated under The Companies Act, [1956/ 2013] having its registered office at [address of the registered office] (hereinafter referred to as the "First Party" which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

[Name of the Other Member 1] incorporated under The Companies Act, [1956/ 2013] having its registered office at [address of the registered office] (hereinafter referred to as the "Second Party" which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

[Name of the Other Member 2] incorporated under The Companies Act, [1956/ 2013] having its registered office at [address of the registered office] (hereinafter referred to as the "Third Party" which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

. . .

The above-mentioned First Party, Second Party and Third Party ... are collectively referred to as the "Parties" and each is individually referred to as a "Party"

WHEREAS,

The Parties are interested in jointly developing the Project as members of the JV and in accordance with the terms and conditions of the Bidding Documents.

It is a necessary condition under the RFP that the members of the Consortium shall enter into a JV Agreement and furnish a copy thereof as per ITB Clause **Error! Reference source not found.**.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this JV Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the Bidding Documents.

2. JV

The Parties do hereby irrevocably constitute a JV ("JV") for the purposes of jointly developing the Project.

The Parties hereby submitted their Bids only through this JV and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Group Business Entity.

3. Covenants

The Parties hereby undertake that the Bidder being selected as the Successful Bidder shall form a new SPV by the members of the JV mandatorily for developing the Project under The Companies Act, 2013. The Successful Bidder shall submit the registration certificate of the SPV within a maximum time period of sixty (60) Days from the date of LoA. Further, the Bidder shall submit the PAN and GST certificate of the SPV within a maximum time period of sixty (60) Days from the date of LoA.

4. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described in the Bidding Documents. The First Party shall be the Lead member of the JV and shall have the power of attorney from all the Other Members for conducting all business for and on behalf of the JV for developing the Project;

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the Bidding Document.

6. Shareholding in the SPV

The Parties agree that the proportion of shareholding among the Parties in the SPV shall be as follows:

Name of the Parties	Role of the Parties	% of subscribed and paid up equity share capital of the JV
[Insert the name of the Lead Member]	Lead Member	
[Insert the name of the Other Member 1]	Other Member 1	
[Insert the name of the Other Member 2]	Other Member 2	

The Parties undertake that the members in the JV shall hold the above % of subscribed and paid up equity share capital of the JV at all times until first one (1) year of operation from COD.

7. Representation of the Parties

Each Party represents to the other Parties as of the date of this JV Agreement that:

- Such Party is duly organized, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this JV Agreement;
- b) The execution, delivery and performance by such Party of this JV Agreement has been authorized by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents including the power of attorney and board resolution in favour of the person executing this JV Agreement for the delegation of power and authority to execute this JV Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - i. require any consent or approval not already obtained;
 - ii. violate any Applicable Law presently in effect and having applicability to it;
 - iii. violate the memorandum and articles of association, by-laws or other applicable organizational documents thereof;

- iv. violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
- v. create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this JV Agreement;
- c) This JV Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and

8. Termination

This JV Agreement shall be effective from the date hereof and shall continue in full force and effect until first one (1) year of operation from COD.

9. Miscellaneous

This JV Agreement shall be governed by laws of India.

The Parties acknowledge and accept that this JV Agreement shall not be amended by the Parties without the prior written consent of OREDA.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED BY THE AUTHORIZED SIGNATORY OF THE RESPECTIVE PARTIES

For and on behalf of Lead Member For and on behalf of Other Member For and on behalf of Other Member

by:	1 by:		2 by:
Name: Designation: Company:	Name: Designation: Company:		Name: Designation: Company:
In the presence of witnesses:			
Name:		Name:	
Designation:		Designation:	
Company:		Company:	

Notes:

- 1. The mode of the execution of the JV Agreement shall be in accordance with the procedure, if any, laid down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.
- 2. This shall be supported by the power of attorneys along with the board resolutions issued by the respective Companies in favour of the respective authorized signatories to execute this JV Agreement.

7.10. Site Details:

Different Parts of Chilika Lake in Odisha.

End of Document