TENDER No. UCSL/CC/T/W/019 Dt 30th May 2024

TENDER FOR ELECTRICAL WORKS OF 3800 DWT GENERAL CARGO VESSEL



UDUPI COCHIN SHIPYARD LIMITED
MALPE, UDUPI 576108



TENDER NOTICE

Tender No. & date	UCSL/CC/T/W/019 Dt 30 TH MAY 2024
Name of work	TENDER FOR ELECTRICAL WORKS OF 3800 DWT GENERAL CARGO VESSEL
Last date & time of receipt of tender	07th JUNE 2024, (FRIDAY) at 15:30hrs
Date & time of opening of Technical Bid (Part-I)	07th JUNE 2024, (FRIDAY) at 15:30hrs

- Password protected quotations in the prescribed form is invited from bidders for the work specified above, subject to the terms and conditions as mentioned in the annexure to the tender enquiry so as to reach the undersigned by email mentioned on or before the date and time as stipulated.
- 2. The following shall be submitted along with the quote: -

PART- I: TECHNICAL BID

- a. **Tender document duly signed on all pages** Including Terms & conditions and Scope of work placed at Annexure I and Annexure II respectively
- b. The Techno commercial Check List at Annexure VII to be filled up completely and duly signed.
- c. Duly filled form at Annexure V
- d. **Unpriced Price bid** (Price bid without price and marked as "QUOTED") to be submitted along with Part-I.

PART-II: PRICE BID

a. The price bids shall be prepared based on the price bid format at Annexure VI.

3. Detailed Work Schedule:

i. The contractor should clearly indicate the time period in days required for the completion of construction of a single vessel including hull structural outfit activities and this committed period will be considered as primary element for the technocommercial qualification of the bidders.

4. Mode of Submission of Quote:

- i. Bid shall be submitted as Password Protected Zip File in two parts.
 Part I: Technical Bid with all enclosures and annexures as mentioned in Para 2 above Part II: Price Bid.
- ii. The files are to be forwarded as **Two (2) separate password protected Zip files** to contractcell@udupicsl.com/vineeshpillai@udupicsl.com



iii. Part I and Part II are to be protected with separate and distinctly different passwords.

- iv. The Bids will be opened on online mode during which the bidder will be advised to share the password through SMS with which the technical bid will be opened.
- v. The price bids will be opened after technical evaluation and only the technically qualified bidders will be invited for opening of price bids which shall also be conducted on online mode as above.
- vi. However, subject to travel restrictions, the bidders can also attend the bid opening physically at Udupi Cochin Shipyard Limited, Baputhotta Ware house complex Office.
- vii. The contractors can also submit the quotations in sealed covers (Two-Bid) as separate sealed covers for Technical Bid and Price bid, both enclosed in a common sealed cover to reach the below mentioned address before the stipulated time.
- 5. The bidders shall ensure the receipt of bids at contractcell@udupicsl.com an acknowledgement mail shall be sent to the bidders on receipt of bids. UCSL takes no responsibility for delay, loss or non-receipt of tenders by mail by the stipulated time.
- 6. The tender should be addressed to the Assistant General Manager (Material & Contract Cell), Udupi Cochin Shipyard Limited, Malpe Harbor Complex, Malpe, Udupi 576 108, Karnataka, India.
- 7. No deviations on the tender conditions will be accepted, and bids with deviations will be considered technically disqualified. The acceptance of a tender or part thereof will rest with the Assistant General Manager (Materials), Tebma Shipyards Limited, tender and reserves the authority to reject the tender received without assigning any reason.

8. Contact Person: Mr. Sarun, (Mob. 08592048487).

Assistant General Manager (Material & Contract Cell)

गणेश आचार्य **GANESH ACHARY** प्रवधक/MANAGER उड़िप कोचीन शिपयार्ड लिमिटेड UDUPI COCHIN SHIPYARD LIMITED माल्पे, कर्नाटक/MALPE, KARNATAKA-576 108

Encl:

- 1. Terms & Conditions
- 2. Scope of Work
- 3. Indicative Quantum
- 4. Power of Attorney
- 5. Price Bid
- 6. Techno-Commercial check List
- 7. Unconditional Acceptance Letter.

- Annexure I
- Annexure II
- Annexure III
- Annexure IV
- Annexure V
- Annexure VI
- Annexure VII



TERMS AND CONDITIONS

TENDER FOR ELECTRICAL WORKS OF 3800 DWT GENERAL CARGO VESSEL

1. DESCRIPTION OF WORK

- 1.1. This tender enquiry pertains to the awarding of contract for "Electrical Works, Cable Laying & Termination of 04 nos of 3800 DWT General Cargo Vessel" to be built at Udupi Cochin Shipvard Limited (UCSL), Malpe, Karnataka.
- 1.2. The work includes installation of all machinery, hot work, shafting, commissioning, survey and sea trail necessary to the satisfactory completion of works in accordance with the requirements of UCSL, Classification society and owner requirements.
- 1.3. Infrastructure and Consumables: The contractor shall complete the work with the available infrastructure facilities and materials provided by Udupi Cochin Shipyard Ltd (UCSL) in accordance with the enclosed Specifications, delivery schedule and UCSL -General Terms and conditions in all respects

1.4. Consumables:

- Gases (DA, Oxygen, CO2 and Argon) will be provided free of cost by UCSL
- · Welding consumables: All welding consumable shall be provided by UCSL on chargeable basis. The charges applicable for welding electrodes are mentioned below:

Welding Electrodes	Rate
Flux Cored GMA (CO2) welding wire 1.2mm	Rs 278 Per kg
Welding electrode: E 6013: 2.5 mm	Rs 268 Per kg
Welding electrode: E 6013: 3.15 mm	Rs 138 Per kg
Welding electrode: E 6013: 4 mm	Rs 156 Per kg
Welding electrode: E 7018: 4 mm	Rs 157 Per kg

^{*}The above prices are inclusive of GST @ 18%.

- 1.5. Welding electrodes and gases used for fabrication / erection purposes will be supplied by UCSL only.
- 1.6. The work is to be carried out at the skid area allocated to the contractor (s) inside UCSL Malpe/Hangarkatte premises.
- 1.7. You are requested to obtain clarifications, if any, and carefully study the documents and the scope of services and UCSL, before submitting your offer.
- 1.8. The Agencies are advised to familiarize themselves with the site conditions before quoting.



2. CLASS & FLAG RULES

The vessels shall be built under the flag and classifications specified as follows:

: NIS (Norwegian International Ship Register) Flag

Classification: Bureau Veritas (BV).

Class Notation: I ₮ Hull ₮ Mach ₮ AUT-UMS Unrestricted navigation General cargo

ship - heavy cargo (150 kN/m²) STRENGTHBOTTOM, OPEN-HATCH

MON-SHAFT INWATERSURVEY

3. SCOPE OF WORK

3.1. The scope of contractor involves Installation of Cable ways & Electrical Equipment Seats vessel) to satisfaction of UCSL / Owner / Class surveyor, and up to the delivery (whole of vessel

3.2. Refer Annexure II and Annexure III for detailed scope of work and indicative quantum of outfit structural works respectively

4. METHOD OF AWARDING CONTRACT

- 4.1. Contract will be concluded with Bidder qualifying technically (including eligibility criteria), agreeing to Commercial conditions (Annexure VI) and emerging as L1.
- 4.2. Work corresponding to the minimum Confirmed One (1no) + One (1nos) options vessels will be placed as assured order for L1 bidder.
- 4.3. Work corresponding to minimum confirmed (01no) + One (01no) options vessels will be placed on the next in-line bidder who matches the prices quoted by L1 bidder.
- 4.4. If none of the alternate bidders matches the L1 price, UCSL reserves the right to split the work / percentage of work to any number of bidders or to cancel the tender if required.
- 4.5. Only the minimum confirmed orders shall be placed on the bidders. Th option vessels shall be confirmed by UCSL subject to decision of UCSL to go ahead with the subsequent vessel constructions and is subject to performance of the contractor on the first set of confirmed vessels awarded to the contractor. The performance shall be assessed by the Operations team based on the manpower mobilization / deployment, planned vs actual progress, quality of workmen etc.
- 4.6. Optional vessels shall be confirmed latest within 5 months from placement of work order on the contractor subject to completion of at least 1st vessel awarded to each contractor.
- 4.7. UCSL reserves the right to cancel the tender if required.

5. QUALIFICATION CRITERIA FOR VENDORS

- 5.1. The Bidder shall be a single firm having experience in Electrical Outfit Structural Works, Cable Laying & Termination in minimum 3 ships or floating marine structures.
- 5.2. The technical experience means "the experience of successfully completed similar works (as per clause 5.1 above) for period of 3 years. In the case of ongoing works, work progress report from the authorized officer of the work order issued firm shall be submitted for considering UCSL requirement.



- 5.3. The bidder should have qualified welders having relevant WPS approved by classification societies.
- 5.4. Average turnover shall be 30 Lakh in last 3 consecutive financial years ending 31st March of last financial year
- 5.5. The contractor must have a site-in charge/ supervisor to execute work, with a minimum experience of 3 yrs. in machinery field.
- 5.6. Documents to prove credentials of the firm to undertake the subject work, eg: Details of available equipments & facilities, Skilled / qualified Manpower, Work experience of similar job, etc. The firm has to submit the documents which validate the abovementioned Clause 5.1 & 5.4 requirements. Work order for material supply will not be considered.
- 5.7. The Bidder should furnish the required work-specific information and satisfactory documentary evidence such as copy of work order / agreement and a certificate from the employer for satisfactory completion of work or any other relevant document indicating completion of work shall be submitted to UCSL in support of its claim of experience.
- 5.8. Bidder shall not be under a declaration of ineligibility issued by Govt. of India/ State govt./ Public Sector Undertakings etc. The bidder shall not have been debarred / black listed by UCSL or by any of the Public Sector Undertaking or Government department

COMMON REQUIREMENTS

- 5.9. The work will be undertaken by only qualified welders of the contractor. Towards this, UCSL will provide the WPS and PQR. Welders will have to be qualified by Class by UCSL. The subcontractor must pay for the welder qualification, testing and certification charges to UCSL on actuals. The contractor must retain the qualified welders till the completion of the project.
- 5.10. Work will be undertaken and inspected as per the quality standards provided by UCSL, and approved by CLASS and Owner of the vessels. The same may be seen prior bidding, if required. Copy of the standards will be provided while awarding contract.
- 5.11. Area and steel skids will be provided by UCSL, leveling of the skid will be undertaken by contractor to the satisfaction of UCSL QC. Required production aids shall be arranged by Contractors.

6. SCHEDULE OF COMPLETION OF VESSELS

- 6.1. UCSL shall indicate the master construction schedule of completion of the work of vessel. The contractor in turn shall submit their detailed scheduled of completion of the work, in consultation with the officer In-charge. The progress of work shall be made in tandem with the progress of completion of the vessel allowing sufficient time for other interface activities/works.
- 6.2. Yard has the right to change the schedules of the project to the interests of the company and the firm should be capable of adjusting the resources according to the instructions from the Yard contact person.
- 6.3. Detailed working schedule (Weekly/monthly) etc to be prepared and submitted to yard personnel. However, a detailed overall schedule, in a reasonable manner should be submitted prior to commencement of work.



7. INSPECTION

- 7.1. The vessel shall be built under the classification of BV.
- 7.2. Work will be undertaken and inspected as per the quality standards provided by UCSL, and approved by CLASS and Owner of the vessels.
- 7.3. The complete work must be carried out under the survey of UCSL, CLASS and Owners. The works are to be inspected and approved by UCSL initially and thereafter presented to CLASS and the Owner for their survey and approval.
- 7.4. All welding machines are to be calibrated.
- 7.5. All test and Inspections shall be carried out as per approved Quality Plan.
- 7.6. All correspondence with the Shipyard to be in English language, including documents and plans to be in English language and in metric units.

8. VALIDITY

8.1. The offer shall be valid for a period of 01 years and no escalation in rate shall be allowed by UCSL on whatsoever reason.

9. RATE

9.1. Rates are to be quoted in the Price Bid Format at Annexure VI attached herewith.

10. PAYMENT TERMS

10.1. Payment will be made in 5 stages:

STAGE I: 25% OF TOTAL CONTRACTED VALUE PER VESSEL

Deliverables: Completion of 90% of the hot work completion including fixing of cable trays, cable penetrations and control panel foundation erection onboard.

STAGE II: 15% OF TOTAL CONTRACTED VALUE PER VESSEL

Deliverables: Completion of 90% of Electrical panel installation, MSB installation and wheel house console installation.

STAGE III: 20% OF TOTAL CONTRACTED VALUE PER VESSEL

Deliverables: Completion of 90% of cable laying and strapping.

STAGE IV: 30% OF TOTAL CONTRACTED VALUE PER VESSEL

Deliverables: On completion of 100% cable termination, Loop testing and electrical system readiness for commissioning.

STAGE V: 10% OF TOTAL CONTRACTED VALUE PER VESSEL

Deliverables: Completion of scope awarded to the contractor subject to clearance of all surveys and inspections by Class, Owner representative, UCSL representative, successful sea trail completion and delivery of the vessel.

- 10.2. Payment shall be made on the basis of certification by UCSL officer in-charge.
- 10.3. The payment shall be made within 30 days from submission of invoice along with the work completion certificate.



- 10.4. All claims for payment for the work/additional work shall be submitted by the contractor within one month of completion of work.
- 10.5. Payment will be made by RTGS/NEFT to the account of Agency. The name of the bank, branch, A/C No., IFSC code & other particulars shall be furnished by the Agency in the proforma of UCSL.

11. TAXES & DUTIES

- 11.1. GST shall be applicable extra on the prescribed work. You are requested to furnish the following details in the invoice/Bill.
 - Applicable rate of GST/SAC Code
 - · Firms GST Reg. NO.
 - Service accounting code (SAC) as prescribed by statutory authorities.
 - GST Reg. No. of Udupi Cochin Shipyard Limited (29AAACT1281B1ZO).

12. PERIOD OF CONTRACT & COMMENCEMENT OF SERVICES

12.1. Period of contract will be one year from the date of work order. The rates quoted and all other terms and conditions will remain unchanged for the entire period and also for the extended period (if extended).

13. SECURITY DEPOSIT

13.1. The successful tenderer shall remit 5% of the value of the contract as security deposit within 15 days of receipt of the work order. This amount may be remitted by way of demand draft or bank guarantee (in approved proforma of UCSL) from any of the nationalized banks, valid till the satisfactory completion of the entire work. The Security Deposit will be released on certification of satisfactory completion of the contract and no liability to UCSL by Officer-in charge. The Security Deposit retained will not bear any interest.

14. PERFORMANCE GURANTEE

- 14.1. The complete work carried out by the contractor shall be guaranteed against defective on poor workmanship for a period of three months from the date of completion of work or till delivery of that vessel, whichever is earlier. Any work found defective during this period is to be repaired entirely at the contractor's cost at the vessel's location and such repaired items shall be guaranteed for a further period of three months from the date of repair.
- 14.2. Should any unsatisfactory performance and / or damage or failure occur due to poor workmanship and poor-quality material used by the contractor, the contractor shall be solely responsible for payment/reimbursement of expenditure incurred by Ship owner for rectifying the defect.
- 14.3. Towards this, a performance guarantee equivalent to 5% of the value of the contract to be furnished by the contractor on completion of the works by way of a bank guarantee (in approved proforma of UCSL, from a nationalized bank valid till the expiry of the guarantee period. In case the contract fails to submit the PG in time, SD mentioned at Clause 11 will be retained till the expiry of guarantee period.



15. LIQUIDATED DAMAGES

- 15.1. The progress of work will be monitored against the mutually agreed detailed schedule. Liquidated damages for delays in execution of the work beyond the scheduled date of completion, for any reason other than force majeure conditions, will be recovered at the rate of half percent of the value of the contract per week or part thereof, subject to a maximum of ten (10) percent of the value of the contract.
- 15.2. For better clarity, order values mentioned in LD clause are values excluding duties and taxes (Basic value). Liquidated damages, if any, shall be decided and settled only after the completion of the entire project but prior to the release of Final stage Payment.
- 15.3. If, for any reasons, supplier has a justification towards delay in supply / work execution and would intend to consider applicability/ non applicability of LD, the same shall be intimated to UCSL by way of a letter, failing which it will be deemed that delay is attributable to the supplier.
- 15.4. Delay in supply/Interruption of the work for reasons not attributable to supplier shall entitle extension of the order execution period for proportionate period without any additional cost to UCSL.

16. POWER OF ATTORNEY

- 16.1. The tenderer(s) shall have to sign in each page of the tender documents with official stamp as a token of his acceptance of the conditions stated therein.
- 16.2. The person signing the tender form on behalf of another or on behalf of a firm, shall enclose to the tender, a Power of Attorney or the said deed duly executed in his favour or the partnership deed giving him such power showing that, he has the authority to bind such other persons or the firm, as the case may be, in all matters pertaining to the contracts. If the Person so signing the tender, fails to enclose the said Power of Attorney, his tender shall be liable for being summarily rejected. The Power of Attorney shall be signed by all partners in the case of partnership concern, by the Proprietor in the case of a proprietary concern, and by the person who by his signature can bind the company in the case of a Limited Company.

17. TERMINATION & LIMITATION OF LIABILITY

- 17.1. This contract may be terminated upon the occurrence of any of the following events
- 17.2. By agreement in writing of the parties hereto;
- 17.3. By the non-defaulting party, upon default by the other party, of any clause of this contract, if not remedied within fifteen (15) days, or such longer time as may be agreed upon by the parties, after receipt of notice thereof in writing from the non-defaulting party;
- 17.4. By the other party, upon either party;
 - i. Making the assignment for the benefit of creditors, being adjudged a bankrupt or becoming insolvent; or
 - ii. Having a reasonable petition filed seeking its' dissolution or liquidation, not stayed or dismissed within sixty (60) days; or
 - iii. Ceasing to do business for any reason.



- 17.5. For fraud and corruption or other unacceptable practices.
- 17.6. Upon expiry or termination of this Contract, neither party shall be discharged from any antecedent obligations or liabilities to the other party under this Contract unless otherwise agreed in writing.
- 17.7. UCSL may by notice in writing to Agency to terminate the order after issuing due notice i.e., 30 days' notice period. UCSL shall be entitled to compensation for loss limited to the order value.
- 17.8. Liability maximum that can be claimed by the Agency shall be limited to what is due to be and has been paid by UCSL for work done as per the payment milestones and limited to work order value.

18. ARBITRATION & JURISDICTION

- 18.1. Any disputes arising during the period of the contract shall, in the first instance be settled by mutual discussions and negotiations. The results of such resolution of dispute shall be incorporated as an amendment to the contract, failing which supplier shall approach the UCSL Grievance Redressal Committee as per relevant clause of the Contract.
- 18.2. If any dispute, disagreement or question arising out of or relating to or in consequence of the contract, or to its fulfillment, or the validity of enforcement thereof, cannot be settled mutually or the settlement of which is not herein specifically provided for, then the dispute shall within thirty days from the date either party informs the other in writing that such disputes, disagreement exists, be referred to arbitration. The arbitrators shall be appointed and the arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act, 1996 (No. 26 of 1996) as amended from time to time and the decision of the Arbitrators shall be final and binding on the parties hereto. The arbitration will be done by a Board comprising one arbitrator nominated by each party, and a mutually agreed Umpire. Each party shall bear its own cost of preparing and presenting its case. The cost of arbitration shall be shared equally by the parties unless the award provides otherwise. Performance under this Contract shall however, continue during arbitration proceedings and no payment due or payable by the parties hereto shall be withheld unless any such payment is or forms a part of the subject matter of arbitration proceedings.
- 18.3. Seat & Venue of Arbitration: The seat & venue of arbitration shall be at Bangalore.
- 18.4. Language of Arbitration: The Language of arbitration shall be English.
- 18.5. Governing Law: The contract shall be governed by Indian Law
- 18.6. In case of disputes, the same will be subjected to the jurisdiction of courts at Bangalore, Karnataka.



19. SUB CONTRACTING AND ASSIGNMENT

- 19.1. Contractor shall not assign or transfer the Purchase Order/ Work Order or any share or interest therein in any manner or degree to any third party without the prior written consent of UCSL.
- 19.2. Contractor shall not contract with any subcontractor and/or vendor without the prior written consent of UCSL. Such consent shall not relieve the Contractor from any of his responsibilities and liabilities under the Purchase Order/ Work Order. In addition, Contractor shall ensure that the terms and conditions of any such contract shall comply with and correspond to the terms and conditions of the Purchase Order/ Work Order.

20. SECRECY & RESTRICTION ON INFORMATION TO MEDIA

- 20.1. The information contained in the enquiry as such shall NOT be communicated to any third party without prior approval of UCSL.
- 20.2. Information in respect of contracts/orders shall NOT be released to the national or international media or anyone not directly involved in its execution without the written approval of UCSL.

21. CANCELLATION OF ORDER AND RISK CONTRACTING

- 21.1. In the event the Agency fails to complete the work promptly and satisfactorily as per the terms of the order, and if any work is delayed beyond thirty (30) days from the agreed schedule, UCSL, without prejudice, reserves the right to cancel the order and get the work done at Agency's cost and the expenditure so incurred including any damage or loss will be recovered from him and the Security Deposit furnished by him is liable to be forfeited either in whole or in part.
- 21.2. UCSL also reserves to right to impose penalties ranging from Rs. 100 to Rs.500 to the employees of agencies and will be deducted from the bills, for any habitual offence on the cleanliness of uniforms, lack of obedience, not attending the tasks etc., and will be to the discretion of the Officer in charge for the work.

22. FORCE MAJEURE

22.1. Should failure in performance of any part of this contract arise from war, insurrection, restraint imposed by Government act or legislation of other statutory authority, from explosion, riot, legal lock-out, flood, fire, act of God or any inevitable or unforeseen event beyond human control which will be construed as a reasonable ground for extension of time, UCSL may allow such additional time as is mutually agreed to be justified by the circumstances of the case.

23. STORAGE OF MATERIAL AND EQUIPMENT

23.1. The Contractor shall arrange the storage of the materials/ equipment etc. if any, at a suitable location assigned by UCSL and shall ensure the safe and secure possession and handling of the items thus handed over to contractor. UCSL shall allot storage space within UCSL premises, if available.



23.2. As regards the equipment/materials stored by him as above as also in use by him, UCSL will not be responsible for any damage, pilferage, accident that may take place during the course of execution of the work. It will be entirely his responsibility to keep all the equipment, materials etc., in safe custody as also hold them duly insured at his expense.

24. IMS GUIDELINES

- 24.1. UCSL implemented an Integrated Management System (IMS) and the Quality Management System (QMS) within the yard. As part of IMS, subcontractors shall comply with the following measures related to the Quality, Health, and Safety & Environment (QHSE) policy of UCSL.
 - a) Meeting or exceeding customer requirements.
 - b) Assuring quality of the products and service.
 - c) Preventing occupational ill health & injuries.
 - d) Ensuring safe work sites.
 - e) Conserving natural resources.
 - f) Preventing / minimizing air, water & land pollution.
 - g) Handling and disposal of Hazardous wastes safely.
 - h) Complying with statutory & regulatory and other requirements.
 - Developing skills and motivating employees.
- 24.2. Occupational Health, safety & Environmental requirements of UCSL shall also include the following.
 - The contractor (or a sub-contractor performing work on behalf of the contractor) is deemed to comply with the Occupational health, safety and environmental policy of the company and also to all operational controls/standard operating procedures and shall undertake the work in total compliance with the requirements of the established Integrated Management System (IMS) of the company.
 - b) The Contractor shall undertake the work in total compliance with all applicable legal/statutory requirements related to occupational health, safety and environment effective in the state of Karnataka.
 - c) It is the sole responsibility of the contractor to assure that any sub-contractor/s who shall perform works in company lands/facilities/worksites on behalf of the contractor, is also following all requirements related to the Integrated Management System of the company and the health/safety/environmental Rules effective in the state.
 - d) The contractor shall provide/implement and operate/practice all occupational health, safety and environmental management measures/facilities, for their period of contract, in their activities/at their work sites, which shall be required according to the IMS of the company or that required by the health/safety/environmental Rules established and effective in the state, at their own cost.
 - e) If any contractor failed to comply with or violated any clauses/requirements of occupational health, safety and environmental Rules effective in the state, in their activities or at work sites and the same shall be exposed to the government or any competent authorities upon inspections, the contractor shall be solely responsible



for all liabilities caused by his/her action and shall be responsible for paying the penalty and taking stipulated corrective actions insisted by the authorities within the specified time, at their own cost. Any liability to the company in this regard needs to be compensated by the contractor.

- Upon completion of the work, contractor shall clear the area and shall not leave any Occupational health/safety/environmental liabilities to the company, from their activities at the worksites.
- g) Any clarification related to IMS requirements of the yard, may be obtained by the contractor from the AGM (HSE) or the authorized representative of the contract, prior to the commencement of work.

25. SAFETY OF PERSONNEL AND FIRST AID

- 25.1. The contractor shall be entirely responsible for the safety of all the personnel employed by him on the work. In this regard, he may adopt all the required safety measures and strictly comply with the safety regulations in force. A copy of UCSL's "Safety Rules for Contractors (Revised)" is available with HSE department for reference.
- 25.2. The Agency may arrange to suitably insure all his workmen/ other personnel in this regard. UCSL will not be responsible for any injury or illness to the Agency's workmen/other personnel during execution of the works due to whatsoever reasons.
- 25.3. In this regard, the Contractor will have to fully indemnify UCSL against any claims made by his workmen/other personnel
- 25.4. The Agency shall provide and maintain so as to be readily accessible during all working hours, a first aid box with prescribed contents at every place where he employs contract labor for executing the works.

26. LABOUR LAWS AND REGULATIONS

- 26.1. The Agency shall undertake and execute the work with contract Labor only after taking license from the appropriate authority under the Contract Labor (Regulation & Abolition) Act 1970.
- 26.2. The Agency shall observe and comply with the provisions of all labour and industrial laws and enactments and shall comply with and implement the provisions of the Factories Act, 1948, Employees Provident Funds & Miscellaneous Provisions Act, 1952, Employees State Insurance Act, Payment of Gratuity Act, minimum Wages Act, Payment of Bonus Act, Contract Labour (Regulation and Abolition) Act and all other enactments as are applicable to him and his workmen employed by him. The Agency shall inform UCSL his license number from the Central Labour Commissioner.
- 26.3. All Persons, except those exempted under the respective Acts, shall necessarily be insured under the ESI scheme and be made members of the EPF Scheme from the day of their engagement as personnel in the Company. In Case 1, All such insured Persons should carry with them their ESI Identity Card for verification by the authorities. No Persons without a valid ESI Identity Card for verification by the authorities will be permitted to work in the company.



- 26.4. The Agency shall submit the Labour Reports/Returns as required by the Company from time to time in respect of their workmen in standard format to the concerned contracting officer so as to enable the same to reach Contract cell by the 5th of every month. Delayed submission of the same shall attract penal interest /damages at the rate as levied by the respective authorities under the relevant Acts.
- 26.5. The Agency shall maintain the records viz. Muster Roll, Acquittance Roll with full details, Account books etc., in original. These are required for inspection by the concerned authorities under each scheme.
- 26.6. If the Agency fails to pay any contributions, charges or other amounts payable under any of the aforementioned provisions of law, UCSL shall deduct or adjust amounts equivalent to such contribution, charges or amounts from amount payable to him by UCSL, including any deposit or amounts payable against bills and make payments on his account to the appropriate authority. He shall not be entitled to question or challenge such deductions, adjustments or payment made by UCSL.
- 26.7. Any other amount payable under any law or in respect of any person employed by the Agency, if not paid by him, shall be deducted or adjusted by UCSL out of any amount payable to the Agency including any Security Receipt and paid ever or withheld for payment by UCSL.
- 26.8. The Agency shall be fully responsible for the conduct and discipline of the workmen employed by him in the Company premises. If such workmen commit any misconduct or criminal act inside the Company, the Agency shall take appropriate action against such workmen. The Agency shall abide by the instructions/ guidelines issued by the Company for maintenance of discipline and good conduct among the workmen employed by him.
- 26.9. All persons who are engaged for various works in UCSL either directly or through Agency/contractors, should produce the following documents prior to issuing their entry passes:
- 26.10. Passport/Aadhaar attested copy of passport with photo and address particulars. OR
 - Police clearance certificate with photo and address particulars. (Police clearance certificate to the effect that the concerned person is staying in the area of jurisdiction of the certificate issuing Police Station and that the person is not involved in any criminal offences as per the records available therein.)
- 26.11. Application and Declaration for enrolling under Employees Provident Fund and ESI Scheme- 3 individual passport size photographs and two copies of family photographs of the members.
- 26.12. Agency shall familiarize themselves with the labour rules & regulations.

27. ELECTRICITY RULES AND REGULATION

27.1. The contractor shall adhere to the various rules in respect of electrical installation as per the Indian Electricity Rules and Regulations and Electrical Inspectorate Standards in order to make sure that men and materials are safe from hazards.



28. OVERWRITING & CORRECTIONS

28.1. Tenders shall be free from overwriting or erasures. Corrections and additions, if any, shall be duly attested and a separate list of such corrections shall be attached with the offer

29. OTHER TERMS & CONDITIONS

- 29.1. Quality of services shall conform to the specification/ standards laid down by UCSL.
- 29.2. UCSL reserves the right to accept / reject any offer.
- 29.3. UCSL reserves the right to award the work to more than one contractor or to take over partially or fully the work depending upon the schedule requirements.
- 29.4. During the evaluation of tender, officer-in-charge may seek clarifications from the bidders. Clarification if any shall be given in writing/e-mail. Officer-in-charge's decision will be final and binding on the bidder.
- 29.5. Compliance of all statutory safety requirements and other safety rules stipulated by UCSL and other applicable statutory bodies shall be the responsibility of the Agency while working at UCSL premises. The Agency should ensure that their workmen and staff are adequately covered under Insurance.
- 29.6. Damages caused to the Shipyard properties/tools/accessories should be rectified by the Agency at his cost or proportional recoveries will be made from the Agency while passing their bills for payment.
- 29.7. The service provider shall have to engage men on round the clock basis and also on Sundays and holidays. Service has to be completed to the satisfaction of Udupi Cochin Shipyard Limited officer in-charge.
- 29.8. The service provider shall indemnify UCSL or its officers against any claims arising out of accidents or injuries to workmen or other persons or damage to other property which may arise during the execution of the contract or from breach of any Law or Regulation prior to delivery and acceptance of the items at UCSL.
- 29.9. The service provider shall also be governed by the General Conditions of Contract of UCSL, General Safety Rules and other relevant labour laws.
- 29.10. The upper age limit of all workers and supervisors employed by the Agency and those Agency who do or supervise the job themselves shall be as per the prevailing rules of UCSL and shall comply to the requirements of this tender.
- 29.11. Assistant General Manager, or his authorized representative will be the Officer-incharge of these contracts.



SCOPE OF WORK

TENDER FOR ELECTRICAL WORKS, CABLE LAYING & TERMINATION OF 3800 DWT GENERAL CARGO VESSEL

1. INTRODUCTION

Yard intends to outsource the electrical works of the vessels as detailed below to competent contractors. Main particulars of the vessel, general arrangement drawing and other relevant technical information on electrical systems is enclosed at Annexure-I

2. SCOPE OF WORK

PART I:

The scope of contractor involves Installation of Cable ways & Electrical Equipment Seats (whole vessel) to satisfaction of UCSL / Owner / Class surveyor, and up to the delivery of vessel which includes the following;

- a) Fabrication of Electrical cable tray supports, flat bars, equipment seats/foundation and coaming.
- b) Installation of complete cable way (cable coamings, Flat bars, cable trays/saddles, cable conduits, gland pipes, Goose necks etc.) for full ship including accommodation area and all related hot works & dry survey, required for satisfactory completion.
- c) Installation of seats for entire Electrical equipment's/systems onboard vessel including accommodation area and all connected hot works for Installation of Field sensors, Level Switches, Remote control valves, Tank sounding system sensors and other instrumentation works. Required copper tubing as applicable is also included in scope of contractor.
- d) Installation of the required number of pads for cable trays & fitting seats while welding trays/ equipment's to tanks & bulkheads/decks, open deck area/Mast etc. including spaces exposed to weather as per requirements shall be done by contractor.

PART II:

Installation Of Electrical Equipment's, Cabling, Cable Termination & Commissioning of Equipment's/Systems

The work shall be carried out based on the contract specification, general arrangement drawing, UCSL mentioned standards and Design drawings. The scope of contractor involves, Installation of equipment, cabling (whole vessel), Cable termination and Commissioning of complete Electrical Equipment/Systems (except those mentioned in yards scope) to the satisfaction of UCSL / Owner / Class surveyor, which includes the following: -

- a) Installation of all electrical equipment.
- b) Laying of cables onboard vessel as per UCSL & marine standards.
- c) The type of cable to laid includes Fiber optic and CAT 7 cables, under water transducer cables, antenna communication cables, maker cables, various inbuilt sensor cables and special cables



- d) Packing of MCT and sealing of cable coamings in the whole ship except for the cable entries in equipment.
- e) Dressing of cables (both temporary and permanent).
- f) Cable Termination of all electrical equipment as per UCSL & marine standards.
- g) Commissioning scope involves loop testing of cables, megger test of electrical motors and cables (if required), commissioning assistance till completion of the vessel.
- h) Supply of Cable lugs, cable glands (generally the same shall be in scope of respective OEM, in case of non-availability), cable securing stainless steel band and buckle, marine grade cable ties including all items as required for cable installation shall be included in scope of contractor. All cable lugs required shall be provided based on the cable list size placed at Annexure-3. PG type cable lugs shall be supplied by the contractor. Cable ties requirement is placed at Annexure-4. Class approved type lugs shall be used.
- i) Cable lugs at actuals required for cable termination to be supplied by the firm. Typical type of lugs to be supplied are hollow pin type, eye type, Pin type and tubular type. The supplied lugs shall be suitable for M4, M6, M8, M10, M12, M16 bolts etc. For cable size of 35Sq.mm and above Double compression long barrel type lugs to be supplied.
- j) Cable identification tags shall be provided. Cable tags shall be PVC/ metal slip in inside area and SS 316 type in outside area. Quantity shall be provided based on the cable list placed at annexure-3.
- k) Segregation and Localized Dressing of cables near individual equipment is under the scope of contractor.
- l) Packing of MCTs and sealing of coamings are under the scope of contractor for the equipment like Generators, Motors and any equipment where cable entry is MCT/coaming.
- m) The commissioning assistance of the entire systems on board vessel is to be provided by contractor.
- n) Material movement & accounting for the items included in the scope of work.
- o) Providing sufficient protection of the installed items as per Yard direction.
- p) Assistance for Survey/Trials presentation to Yard I&QC, Owners and Class authorities as per yard practices.
- q) Survey presentation to yard I&QC, owners and class authorities as per yard practices and standards. Documents for the same may be provided by UCSL. Copies of the same will be provided at the time of awarding contract. Checklist as per yard standard will be shared.
- r) Rectification of defects as per the comments from Yard I&QC, Owners & Class authorities.
- s) Earthing of equipment. Welding of earth bolts where ever required is under the scope of the sub-contractor. Supply of Earthing cable and required earthing bolts is in the scope of contractor.
- t) Fixing of Name Tags for equipment and cables. Sleeve printing and fixing on cables and cable cores are also under the scope of sub-contractor. Sleeve printer and other accessories are to be arranged by sub-contractor. Materials required for Cable ID tag like, PVC ferrule and PVC strip are under the scope of sub-contractor
- u) Laying of load testing cables and cable termination at Load bank/Transformer and MSB side will be under subcontractor scope. Any assistance required for Load Testing of Generators should be provided by the sub-contractor.
- v) Assistance of the electrical personnel on the Machinery commissioning & Accommodation outfitting activities as directed by Yard during Harbor Trials.



- w) Minor re-works on the installation has to be expected in considering the outfitting of items, and the changes has to be carried out as per the drawings issued by design department time to time.
- x) Minor rectification / modification works have to be undertaken by the contractor as part of the job, at no extra cost.

3. OTHER RESPONSIBILITIES OF THE OUTSOURCED FIRM FOR ALL CATEGORIES **OF WORKS**

- a) The transportation, storage, preservation and protection of the materials etc, intended for installation on the ship, will be under the responsibility of the firm.
- b) All works shall be carried out according to approved drawings issued by Yard and Yard standards provided.
- c) All work to comply with the requirements of the Classification Society /Owners/Marine standards /UCSL Quality standard and based on the building practice of the Yard.
- d) Qualified Manpower, equipment's, testing tools with valid certification, installation aids, tools including winches for cabling through pipes etc necessary for the work will be the responsibility of the contractor and should be carried out as per UCSL standards.
- e) Yard has the right to change the schedules of the project to the interests of the company and the firm should be capable of adjusting the resources according to the instructions from the Yard contact person.
- f) Detailed working schedule (Weekly/monthly) etc to be prepared and submitted to yard personnel. However, a detailed overall schedule, in a reasonable manner should be submitted prior to commencement of work.
- g) Localized lighting, DBs etc for the smooth work shall be arranged by Yard based on availability.
- h) Mobilizing own equipment, necessary working tools and tackles, safety and protective gear for their personnel inside the yard for carrying out the work as per Safety/Statutory rules/Yard rules of working people under the subcontractor is the responsibility of the sub-contractor.
- i) Firm shall be responsible for safety and welfare of all its employees employed for construction, and shall be responsible for payment of all salaries to their employees and other statutory dues and for all provisions of statues governing them.
- j) Once the item/material is issued to the contractor, proper accounting of the items consumed shall be maintained, till the delivery of vessel.
- k) The contractor, on receipt of any material, is requested to immediately verify the quality and quantity of the material with respect to the requirement and inform the executing officer any shortage/discrepancy noted/anticipated well in advance so that UCSL can take corrective action in time.
- l) Ensuring the best housekeeping practices to keep the work premises neat & clean in daily basis.
- m) Minor staging up to 3meter height shall be erected by the contractor for the work using UCSL material without any extra charges. Any requirement over and above this shall be arranged by UCSL separately.



4. METHODOLOGY OF WORKING

- a) A detailed project report to be submitted prior to commencement of works.
- b) The subcontractor shall deploy/nominate a person who will be in charge of the work for the entire period of project execution. He shall keep close liaison with UCSL officers/supervisors concerned and ensure smooth and satisfactory progress of the work from time to time and shall be available for the entire duration of the project.
- c) Necessary competent supervisors for the work, to be deployed.
- d) Employees of the firm shall work under close coordination with yard personnel, structural contractors and Piping/Painting/accommodation subcontractors with a conciliatory approach and team spirit to achieve the project completion in time.
- e) The Contractor is expected to have full knowledge and understanding of the Labour rates, conditions, practices etc prevalent in the Yard and premises. The contractor shall be entirely responsible for all matters related to manpower and labour engagement for the subject contract.
- f) Issues related to availability and utilization of manpower shall be dealt by the Contractor. Availability of competent labour with requisite skills for the specified jobs shall be ensured by the contractor.
- g) The complete work is to be carried out with the highest degree of workmanship under the inspection of UCSL, Classification society (when specifically indicated in the technical specifications), Ship owner, or any other agency nominated by Shipyard.
- h) The contractor shall execute the work in every area under instruction/intimation to UCSL personnel at site. Clearance from UCSL in terms of permits/internal regulations etc as applicable from time to time shall be obtained. The contractor shall obtain necessary hot work sanctions, permission to work in confined areas, safety clearance for scaffolding done by the contractor, electrical related provisions etc. as per UCSL safety rules.
- i) The Contractor is to ensure proper cleanliness all around his work area while working on board ship. The contractor shall arrange to collect and clean up every day all the waste, scrap, debris etc. generated by his workmen while working on board the ship and other locations and deposit the same suitably at specified location at his cost to the complete satisfaction of Yard. In case of any failure on his part to comply with the requirement, Yard will arrange the required cleaning entirely at the contractor's cost.
- i) The firm / contractor shall be responsible for any damage caused to the material supplied by UCSL. Compensation with penalty for damage or loss of the item will be recovered from the Contractor, in the event of loss or damage. The responsibility is limited only with respect to the damages caused due to any mistake or negligence of
- k) Contractor / firm are required to work round the clock / Sundays / holidays as per the requirement of concerned department in order to complete the work in
- 1) The upper age limit of all workers and supervisors employed by the contractor / firm and those contractors who do or supervise the job themselves shall be as per the prevailing rules of UCSL.
- m) Any particulars/literature/information/certificates required by the Shipyard in connection with the work is to be forwarded free of cost.



INDICATIVE QUANTUM OF ELECTRICAL WORKS

TENDER FOR ELECTRICAL WORKS, CABLE LAYING & TERMINATION OF 3800 DWT GENERAL CARGO VESSEL

<u>S1.</u> No	INDICATIVE QUANTUM OF ELECTRICAL WORKS	
1.	ICCP (Impressed Current Cathodic Protection System)	Included
2.	ICAF (Impressed Current Anti Fouling System)	Included
3.	Auto telephone	Included
4.	Talkback system	Included
5.	PA system	Included
6.	Normal (LED Light) & Emergency light	Included
7.	Switches and sockets	Included
8.	Fire detection and Alarm System (Central control unit, Smoke detectors and flame detectors etc)	Included
9.	Navigation & Communication including the console (Radars, ECDISs, Gyro compasses, Speed log, Echo sounder, Autopilot, AIS, VHF, MF/HF, Inmarsat-c's, SART, EPRIB, BNWAS, DGPS)	Included
10.	Navigation lights	Included
11.	Flood light	Included
12.	Search light	Included
13.	Explosion proof sockets	Included
14.	Galley equipment	Included
15.	Laundry equipment	Included
16.	Ventilation fans	Included
17.	AC plant	Included
18.	Machinery pump (bilge, Ballast, fire, Fuel oil transfer pump, Cooling water pump, Hydrophore pump, Steering Gear pump, dirty oil pump, urea pump)	Included
19.	Calorifier control panel	Included
20.	Sewage treatment plant control panel	Included
21.	Oily water separator control panel	Included
22.	Propulsion Package (VFD, Propulsion control panel, brake resistor, static converter, Control Panel)	Included
23.	Distribution system (400V MSB, 500V Propulsion Swbd, 500V Bow Thruster Swbd, 400/230V MSB (Combined), 400/230V Emergency	
24.	DG Control panels	Included
25.	Alarm Monitoring system	Included



<u>S1. No</u>	INDICATIVE QUANTUM OF ELECTRICAL WORKS	
26	Window wiper	Included
27	CCTV	Included
28	LAN	Included
29	MCT	Included
30	Anchor & Winch Control panels	Included
31	Gantry crane control panel	Included
32	CO2 System	Included
33	Power management System (PMS Workstations)	Included
34	Loading Computer	Included
35	Navigation Light Control Panel	Included
36	Optical Signalling Equipment	Included
37	ACOUSTICAL SIGNALLING EQUIPMENT (Loud Hailer, Air Whistle)	Included
38	Wheelhouse Consoles	Included
39	Cargo holds Smoke Detection System	Included
40	DEADMAN ALARM SYSTEM	Included
41	Communication System	Included
42	Satellite Data System	Included
43	GMDSS console	Included
44	Purifier Control Panel	Included



Sl No:	Electrical Hot work	<u>Unit</u>	Qty	Location
1	Installation of Z-type cable ladder (GAL) 400mm	Mtrs	175	
2	Installation of Z-type cable ladder (GAL) 200mm	Mtrs	90	
3	Installation of Z-type cable ladder (GAL) 100mm	Mtrs	100	
4	Fabrication & installation of cable coaming 460 WT	Nos	20	
5	Fabrication & installation of cable coaming 460 NWT	Nos	20	
6	Fabrication & installation of cable coaming 260 WT	Nos	20	
7	Fabrication & installation of cable coaming 260 NWT	Nos	20	
8	Installation of flat bar 50x6	Mtrs	400	
9	Installation of flat bar 25x6	Mtrs	400	
10	Earth bush fit up & welding	Nos	300	
11	External equipment cable duct tube fit up & welding	Nos	250	
12	Seat for 400/230V MAIN SWITCHBOARD, 3PH, 4WIRE, 50Hz, IP-23	Nos	1	
13	Seat for 400/230V EMCY SWITCHBOARD, 3PH, 4WIRE, 50H, IP-22	Nos	1	
14	Seat For 400V GROUP STARTER PANEL, IP-44	Nos	2	
15	Seat for 400V VFD STARTER PANEL (15KW), IP-22	Nos	2	
16	Seat for 400V SHORE CONNECTION BOX 160A, IP-56	Nos	1	
17	Seat for 400V POWER DISTRIBUTION BOARD, IP-44	Nos	2	
18	Seat for 230V DISTRIBUTION BOARD, IP-44	Nos	09	
19	Seat for 24V DC TRU CUM DISTRIBUTION BOARD (2KW), IP-22	Nos	3	
20	Seat for 24V DC LIGHTING DISTRIBUTION BOARD, IP-44	Nos	2	
21	Seat for BATTERY CHARGER PANEL FOR RADIO (20A), IP-22	Nos	2	
22	Seat for MDG BATTERY CHARGER PANEL (1KW), IP-22	Nos	3	
23	Seat for EDG BATTERY CHARGER PANEL (0.5KW), IP-22	Nos	2	
24	Seat for REMOTE START/STOP PUSH BUTTON STATIONS	Nos	30	
25	Seat for EMERGENCY STOP PUSH BUTTON STATION	Nos	30	
26	Seat for 24V BATTERY 200AH, IP-22	Nos	8	
27	Seat for static converter	Nos	2	
28	Seat for break resistor	Nos	4	
29	Seat for DG control panel	Nos	4	
30	Seat for Talkback System	Nos	5	
31	Seat for General Alarm system	Nos	2	
32	Seat for Auto telephone Exchange	Nos	1	
33	Seat for PA system	Nos	20	



S1 No:	Electrical Hot work	Unit	Qty	Location
34	Seat for Fire detection system	Nos	11	
35	Seat for Fire manual call point	Nos	9	
36	Seat for Sounder/flasher	Nos	14	
37	Seat for BWTS panel	Nos	2	
38	Seat for CCTV	Nos	2	
39	Seat for Loading Computer desktop type PC	Nos	1	
40	Seat for X Band Radar System Antenna	Nos	2	•
41	Seat for DGPS System Antenna	Nos	2	
42	Seat for AIS System Antenna	Nos	1	
44	Seat for Echo sounder System Transducer	Nos	1	
45	Seat for Speed log System Transducer	Nos	1	
46	Seat for Gyro compass System	Nos	2	
47	Seat for VHF with DSC Antenna	Nos	2	
48	Seat for MF/HF system Antenna	Nos	1	
49	Seat for LED Down light for Machinery Area	Nos	143	
50	Seat for LED down Light for Outside Area	Nos	50	
51	Seat for Ex-proof LED light at Paint room & Gangways at Cargo area	Nos	12	
52	Seat for switch sockets	Nos	12	
53	Seat for Navigation Lights	Nos	20	
54	Seat for Search light	Nos	1	
55	Seat for Acoustical and optical Signalling Equipment	Nos	2	
56	Cutout for LED down light for cabins passageway & staircase	Nos	137	
57	Seat for LED Berth light	Nos	12	
58	Seat for LED chart light	Nos	2	
60	Cutout for LED toilet light	Nos	12	
61	Seat for LED Mirror light	Nos	13	
62	Seat for LED WALL LIGHT	Nos	12	
63	Seat for 6 way junction box for both accommodation & machinery area	Nos	60	
64	Seat for Water Ingress System	Nos	4	
65	Seat for Alarm Monitoring System sensor	Nos	103	
66	Pressure transmitter/Temperature transmitter	Nos	5	
67	Goose necks	Nos	75	
68	Rescue boat Control Panel	Nos	1	
69	Window wiper	Nos	3	
70	Automation System Control panel	Nos	2	



SI **Electrical Hot work** Unit Location Qty No: 71 MCT Nos 10 72 Seat for steering gear control panel Nos 2 73 Seat for Air compressor panel Nos 2 74 Seat for batteries Nos 10 75 Seat for anemometer Nos 1 76 Seat for NAVTEX System Nos 1 77 Seat for SART Nos 2 78 Seat for EPIRB Nos 1 79 Seat for BNWAS system Nos 6 Console (Wheelhouse Fwd, Wheelhouse PS and SB, 80 Nos 4 GMDSS console) Seat for LAN Network Switches 81 Nos 3 82 Seat for ECDIS system Monitor Nos 1 Seat for Satellite Data System 83 Nos 1 84 Seat for Drive Unit for Propulsion Motor 2 Nos Seat for Drive Unit for Bow Thruster Motor 85 Nos 1 2 Seat for 50KVA Transformer 500/430V 86 Nos Emergency Stop Panel 88 Nos 1 89 Seat for UPS 2 Nos 90 Seat for Navigation Light Control Panel Nos 1 Seat for GMDSS Distribution Board 1 91 Nos



SL. No	Electrical Installation items	Unit	Qty	Locati on
1	400/230V MAIN SWITCHBOARD, 3PH, 4WIRE, 50Hz, IP-23	Nos	1	
2	400/230V EMCY SWITCHBOARD, 3PH, 4WIRE, 50H, IP-22	Nos	1	
3	400V GROUP STARTER PANEL, IP-44	Nos	2	
4	400V VFD STARTER PANEL (15KW), IP-22	Nos	2	
5	400V SHORE CONNECTION BOX 160A, IP-56	Nos	1	
6	400V POWER DISTRIBUTION BOARD, IP-44	Nos	2	
7	230V DISTRIBUTION BOARD, IP-44	Nos	09	
8	24V DC TRU CUM DISTRIBUTION BOARD (2KW), IP-22	Nos	3	
9	24V DC LIGHTING DISTRIBUTION BOARD, IP-44	Nos	2	
10	BATTERY CHARGER PANEL FOR RADIO (20A), IP-22	Nos	2	
11	MDG BATTERY CHARGER PANEL (1KW), IP-22	Nos	3	
12	EDG BATTERY CHARGER PANEL, IP-22	Nos	2	
13	REMOTE START/STOP PUSH BUTTON STATIONS	Nos	30	
14	EMERGENCY STOP PUSH BUTTON STATIONS	Nos	30	
15	24V BATTERY 200AH, IP-22	Nos	8	
16	static converter	Nos	2	
17	break resistor	Nos	4	
18		Nos	4	
19	DG control panel	Nos	5	
	Talkback System	_	2	
20	General Alarm system	Nos Nos	1	
21	Auto telephone Exchange	Nos	42	
22	PA system		25	
23	Fire detection system Sensor	Nos		
24	Fire manual call point	Nos	18	
25	Sounder/flasher	Nos	25	
26	BWTS panel	Nos	2	-
27	CCTV	Nos	2	
28	Loading Computer desktop type PC	Nos	1	-
29	X Band Radar System	Nos	2	
30	DGPS System	Nos	2	-
31	Autopilot System	Nos	1	
32	AIS System	Nos	1	-
33	Echo sounder System	Nos	1	-
34	Speed log System	Nos	1	-
35	Gyro compass System	Nos	2	-
36	VHF with DSC watch receiver system	Nos	2	
37	MF/HF system	Nos	1	
38	LED Down light for Machinery Area	Nos	143	
39	LED down Light for Outside Area	Nos	50	
40	Ex-proof LED light at Paint room & Gangways at Cargo area	Nos	12	
41	switch sockets	Nos	25	
42	Navigation Lights	Nos	20	
43	Search light	Nos	1	
44	Acoustical and optical Signaling Equipment	Nos	2	
45	LED down light for cabins passageway & staircase	Nos	137	
46	Berth light	Nos	12	
47	Desk light	Nos	10	



SL. No	Electrical Installation items	Unit	Qty	Location
48	chart light	Nos	2	
49	toilet light	Nos	12	
50	Mirror light	Nos	13	
51	WALL LIGHT	Nos	12	
52	6-way junction box for both accommodation & machinery area	Nos	60	
53	Water Ingress System	Nos	4	
54	Alarm Monitoring System sensor	Nos	103	
55	Pressure transmitter/Temperature transmitter	Nos	5	
56	Goose necks	Nos	75	
57	Rescue boat Control Panel	Nos	1	
58	Window wiper	Nos	3	
59	Automation System Control panel	Nos	2	
60	MCT	Nos	10	
61	steering gear control panel	Nos	2	
62	Air compressor panel	Nos	2	
63	batteries	Nos	10	
64	anemometer	Nos	1	
65	NAVTEX System	Nos	1	
66	SART	Nos	2	
67	EPIRB	Nos	1	
68	BNWAS system	Nos	6	
69	ICCP control panel	Nos	1	
70	ICAF control panel	Nos	1	
71	Shaft earthing device	Nos	1	
72	shaft monitoring system	Nos	1	
73	space heater panel	Nos	16	
74	CO2 panel & sounder	Nos	2	
75	INMARSAT C System	Nos	2	
76	Console (Wheelhouse Fwd, Wheelhouse PS and SB, GMDSS console)	Nos	4	
77	LAN Network Switches	Nos	3	
78	ECDIS system	Nos	2	
79	Satellite Data System	Nos	1	
80	Drive Unit for Propulsion Motor	Nos	2	
81	Drive Unit for Bow Thruster Motor	Nos	1	
82	50KVA Transformer 500/430V	Nos	2	
83	Emergency Stop Panel	Nos	1	
84	UPS	Nos	2	
85	Navigation Light Control Panel	Nos	1	
86	GMDSS Distribution Board	Nos	1	
87	Light signal column	Nos	5	

87 | Light signal column | Nos | 5 |

Note: For all the above items the nuts and bolts required for installation is in the scope of contractor.



Sl. No	SYSTEM	No. of	TOTAL
		CABLES	(METER)
1	POWER SYSTEM CABLE		
	3Cx150 Sq.mm to 3Cx16 Sq.mm	50	4000
	3Cx10 Sq.mm to 3Cx1.5 Sq.mm	650	11500
	4Cx95 Sq.mm to 4Cx16 Sq.mm	50	1500
2	VFD CABLES 3Cx95 Sq.mm	50	100
3	SIGNAL CABLE		
	14x2x0.75 Sq.mm to 7Cx2x0.75 Sq.mm	50	600
	5Cx2x0.75 Sq.mm to 1Cx2x0.75 Sq.mm	700	5000
	7Cx2x1.5 Sq.mm to 2Cx2x1.5 Sq.mm	750	19000
4	SUPPLIER CABLES	120	2000
5	CAT 7 CABLES*	80	2000
	TOTAL CABLES	2450	49500
Notes: I	ncluding cable strapping & cable survey		
	CABLE GLAND TERMINAT		
Sl. No	SYSTEM	No. of CABLES	Number of Ends
1	Power System Cable		
	3Cx150 Sq.mm to 3Cx16 Sq.mm	50	100
	3Cx10 Sq.mm to 3Cx1.5 Sq.mm	650	1300
	4Cx95 Sq.mm to 4Cx16 Sq.mm	50	100
2	VFD CABLES 3Cx95 Sq.mm	50	100
3	SIGNAL CABLE		
	14x2x0.75 Sq.mm to 7Cx2x0.75 Sq.mm	50	100
	5Cx2x0.75 Sq.mm to 1Cx2x0.75 Sq.mm	700	1400
	7Cx2x1.5 Sq.mm to 2Cx2x1.5 Sq.mm	750	1500
4	SUPPLIER CABLES	120	240
5	CAT 7 CABLES*	80	160
			1

Notes: *160 Nos. Connector for CAT 7 cable to be supplied



Udupi Cochin Shipyard Limited

TENDER FOR ELECTRICAL WORKS OF 3800 DWT GENERAL CARGO VESSEL UCSL/CC/T/W/019

WEIGHT DETAILS OF ELECTRICAL EQUIPMENT

Following items with approximate weight details are to be installed on board the vessel.

SL. No	Equipment Details	Weight	Quantity	UOM
1	Drive Switchboard	2500Kg	1	Nos
2	Propulsion Motor control panel	2300Kg	1	Nos
3	Main Switchboard	1300Kg	1	Nos
4	Bow thruster control panel	750Kg	1	Nos
5	Static converter	650Kg	4	Nos
6	Weight of the Electrical Equipment	100 to 200Kg	15	Nos
7	Weight of the Electrical Equipment	50 to 100Kg	25	Nos
8	Weight of the Electrical Equipment	10 to 50 Kg	20	Nos
9	Weight of the Electrical Equipment	0 to 10 Kg	593	Nos

- a) Following items as required at actuals are to be supplied
 - i. Flame Retardant Nylon 6.6 cable tie locking type- Black colour (for using inside panel).
 - ii. Flame Retardant Nylon cable tie locking type White colour (For temporary tying)
 - iii. Stainless steel PVC cable tie SS 316- Custom length as per required length and SS loose piece head(buckle).
- b. Thickness of SS 316 steel ties shall be within 0.4 mm.
- c. Cable ties shall be suitable for using in marine environment. Data sheets for the offered items shall be attached along with the offer.
- d. Cable ties shall be able to keep their locked position irrespective of the onboard vibrations and ship movements.
- e. For steel cable ties of custom length supplied in rolls, the length of cable ties per roll shall be specifically mentioned in the offer.
- f. Approval/ manufacturers declaration certificate for conformity to 316 grades for stainless steel ties to be forwarded along with the offer.
- g. For flame retardant type nylon ties, necessary documentary evidence in proof of flame retardancy property shall be furnished along with the offer.
- h. Samples for the offered items shall be produced upon request from Yard with suitable identification, of each type for checking their technical suitability.
- i. The quantity required shall be estimated by the contractor based on the cable list indicated.

All clarifications required if any regarding dimensions, material, etc. for items should be made before submission of offer. Any deviation made from the material, process specifications should be intimated and approval obtained.

POWER OF ATTORNEY

(On Applicant's letter head)

(Date and Reference)

To
The Assistant General Manager (Materials & Contract cell)
Udupi Cochin Shipyard Limited
Fishing Harbour complex, Malpe,
Udupi 576 108.



UCSL/CC/T/W/019

TENDER FOR ELECTRICAL WORKS OF 3800 DWT GENERAL CARGO VESSEL PRICE BID

SL NO	WORK DESCRIPATION	QTY	UOM	TOTAL
1	ELECTRICAL WORKS, CABLE LAYING & TERMINATION OF 3800 DWT GENERAL CARGO VESSEL as per the scope of work and Indicative list of work.	1	Shipset	
2	IGST/GST %			
3	GRAND TOTAL AMOUNT (INR)			
AMO	UNT IN WORDS:			

Note: L1 will be determined based on the Total price of Price bid format.

Signature:

Address of the contractor:

Seal:



ADDENDUM Price (Only for Reference purpose) HOT WORK LIST

Sr. No	Electrical Hot work	<u>Unit</u>	<u>Unit Price</u>
1	Installation of Z-type cable ladder (GAL) 400mm	Mtrs	
2	Installation of Z-type cable ladder (GAL) 200mm	Mtrs	
3	Installation of Z-type cable ladder (GAL) 100mm	Mtrs	
4	Fabrication & installation of cable coaming 460 WT	Nos	
5	Fabrication & installation of cable coaming 460 NWT	Nos	
6	Fabrication & installation of cable coaming 260 WT	Nos	
7	Fabrication & installation of cable coaming 260 NWT	Nos	
8	Installation of flat bar 50x6	Mtrs	
9	Installation of flat bar 25x6	Mtrs	

Sl. No	SYSTEM	No. of CABLES	TOTAL(METER)	Rate/Meter
1	POWER SYSTEM CABLE			
	3Cx150 Sq.mm to 3Cx16 Sq.mm	50	4000	
	3Cx10 Sq.mm to 3Cx1.5 Sq.mm	650	11500	
	4Cx95 Sq.mm to 4Cx16 Sq.mm	50	1500	
2	VFD CABLES 3Cx95 Sq.mm	50	100	
3	SIGNAL CABLE			
	14x2x0.75 Sq.mm to 7Cx2x0.75 Sq.mm	50	600	
	5Cx2x0.75 Sq.mm to 1Cx2x0.75 Sq.mm	700	5000	
	7Cx2x1.5 Sq.mm to 2Cx2x1.5 Sq.mm	750	19000	
4	SUPPLIER CABLES	120	2000	
5	CAT 7 CABLES*	80	2000	
	TOTAL CABLES	2450	49500	



CABLE GLAND TERMINATION					
Sl. No	SYSTEM	No. of CABLES	Number of Ends	Unit Price	
1	Power System Cable				
	3Cx150 Sq.mm to 3Cx16 Sq.mm	50	100		
	3Cx10 Sq.mm to 3Cx1.5 Sq.mm	650	1300		
	4Cx95 Sq.mm to 4Cx16 Sq.mm	50	100		
3	VFD CABLES 3Cx95 Sq.mm	50	100		
4	SIGNAL CABLE				
	14x2x0.75 Sq.mm to 7Cx2x0.75 Sq.mm	50	100		
	5Cx2x0.75 Sq.mm to 1Cx2x0.75 Sq.mm	700	1400		
	7Cx2x1.5 Sq.mm to 2Cx2x1.5 Sq.mm	750	1500		
5	SUPPLIER CABLES	120	240		
6	CAT 7 CABLES*	80	160		
	TOTAL CABLES	2450	4900		

Notes:

1. *The above rates are for reference purpose only.



ANNEXURE-VI TECHNO COMMERCIAL CHECK LIST (To be submitted by the bidder)

(Bidders may confirm acceptance of the Tender Conditions/deviations if any to be specified)

SL No.	Tender Enquiry Requirements	Confirmation from bidder (Strike off whichever is not applicable)	Specific comments /Remarks
1	Terms & Condition, Scope of work & Indicative Quantum of Work. (Annexure-I, II & III)	Agreed as per tender /Do not agree	
2	Schedule	Agreed as per tender/Do not agree	
3	Unconditional Acceptance	Agreed as per tender/Do not agree	
4	Offer Validity	01 Years - Agreed as per tender/Do not agree	
5	Taxes & Duties	Specified/included in Price	
6	Payment terms - confirm		
а	As per Clause 9 of Annexure - I	Agreed as per tender/Do not agree	
7	Price shall remain firm and fixed and No Escalation in prices after awarding of contract	Agreed as per tender/Do not agree	
8	Security Deposit	Agreed as per tender/Do not agree	
9	Performance Guarantee	Agreed as per tender/Do not agree	
10	Force Majeure	Agreed as per tender/Do not agree	
11	Liquidated damages and cancellation of contract	Agreed as per tender/Do not agree	
12	Arbitration & Jurisdiction clauses	Agreed as per tender/Do not agree	
13	Confirm all other terms and conditions of our enquiry are acceptable.	Confirmed/Not confirmed	
14	Deviations from Tender conditions	No Deviations	

Signature:

Address of the Contractor:

Seal:

UNCONDITIONAL ACCEPTANCE LETTER

(Unconditional acceptance to be given by in letter head)

ACCEPTANCE OF TENDER CONDITIONS

- Tender Document no. UCSL/CC/T/W/019 Dt 30th MAY 2024 Tender for Electrical Works of 3800 DWT General Cargo Vessel at UCSL has been received by me/us and I/We hereby unconditionally accept the tender conditions of tender documents in its entirety for the above work.
- It is further noted that it is not permissible to put any remarks/conditions in the tender enclosed in "Part-2 (price bid)". I/We agree that the tender shall be rejected and ACCEPTING AUTHORITY.

(Signature of	the tenderer)	with rubber	stamp
Datas			

Yours faithfully,