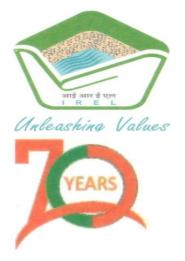
This tender floated in GeM portal. Bidder has to submit their offer through GeM only.









र्यूवम्हाडयनरअस्वर्यसालामटड Formerly mulan Kare Earths Etu.) रेअरअर्थ्सप्रभाग Rare Earths Division, उद्योगमंडल Udyogamandal, कोची Kochi-683501

CIN: U15100MH1950GOI008187 ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 COMPANY

GST ID No. 32AAACI2799F2ZM



## **SCHEDULE OF TENDER**

IREL Tender No.	IREL/Udyogamandal/23-24/ 25695		
Name of Work	Supply, installation & commissioning of 60 KW roof top		
	grid connected solar power plant		
Type of Tender	Open Tender, Single Stage Two Bid System Two cover		
	System		
Estimated Cost	Rs.50,00,000/- (all inclusive)		
	Rs.1,00,000/- (Details as per Annexure -I) (Only		
Earnest Money Deposit (EMD)	manufacturers for goods and Service Providers for		
Larriest Worley Deposit (LWD)	Services are eligible for exemption from EMD for MSE		
	category bidders).		
Validity of tender	90 days from bid due date		
SD/PBG	5% of the contact value		
Contact details of tender inviting authority	Shri. Abel Devadhason		
	CM-Technical (Purchase)		
	IREL (India) Limited, R E Division,		
	Udyogamandal - 683 501, KERALA		
	E-mail: <u>purchase-red@irel.co.in</u>		
	Ph. No. 0484-2545199		

#### **BIDDING SYSTEMS**

This is a two-part tender. The tenderers should bifurcate their quotations in two parts (Part-I & II).

PART-I "Techno-commercial bid":

It contains the eligibility, technical quality, performance aspects, EMD, commercial terms & conditions and documents sought in the tender, **except the price and relevant financial details.** 

PART-II "Financial bid":

It contains the price quotation along with other financial details.

PART-I shall be opened first and evaluated by a committee constituted by competent authority.

PART-II: the financial bid of Techno-commercially eligible bidders shall be opened on recommendation of above committee on a notified date and time after sending advance notice to all qualified bidders for being present.

#### **DISCLAIMER**

The information contained in this tender document (the "TENDER") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form, by or on behalf of IREL or any of its employees, is provided to Bidder(s) on the terms and conditions set out in this TENDER and such other terms and conditions subject to which such information is provided. The information provided is only for the information and reference of the Bidders.

This TENDER is not an agreement and is neither an offer by IREL to the prospective Bidder(s) or any other person. The purpose of this TENDER is to provide interested parties with information that may be useful to them in the formulation of their bid for participation in this TENDER. This TENDER includes statements, which reflect various assumptions and assessments arrived at by IREL in relation to the tender work. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This TENDER may not be appropriate for all persons, and it is not possible for IREL, or its employees to consider the investment objectives, financial situation and particular needs of each party who reads or uses this TENDER. The assumptions, assessments, statements and information contained in this TENDER may not be complete, accurate, adequate or correct. Each Bidder should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this TENDER and obtain independent advice from appropriate sources.

Information provided in this TENDER to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. IREL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

IREL, its employees and consultant make no representation or warranty and shall have no liability to any person, including any Bidder, under any law, statute, rules or regulations, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this TENDER or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the TENDER and any assessment, assumption, statement or information contained therein or deemed to form part of this TENDER or arising in any way with qualification of Bidders for participation in the Bidding Process. IREL also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this TENDER. IREL may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this TENDER.

The issue of this TENDER does not imply that IREL is bound to select and short-list qualified Bids for Price Bid stage or to appoint the Selected Bidder for the intended work, and IREL reserves the right to reject all or any of the Bids without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by IREL or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and IREL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

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7.	EMD Declaration – Annexure - VI
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## **GENERAL INSTRUCTIONS TO BIDDERS**

#### **GENERAL**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

#### PREPARATION AND SUBMISSION OF BIDS

- 1) The tender bids duly filled in all aspects and uploaded at GEM Portal on or before the scheduled time and date as mentioned in the tender enquiry will be considered for evaluation.
- 2) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e., on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 3) The Bids shall be prepared in two parts viz. PQ cum Technical Bid (Part-I) and Price Bid (Part-II). The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 4) Technical Bid will be opened at the first instance and evaluated by IREL's concerned authority. In the second stage, financial bids of only the technically eligible offers will be opened for further evaluation and ranking before awarding the contract.

PQ cum Techno-commercial bid (Part -I)

It contains documents in support of eligibility criteria, self-attested tender document and any other document specifically specified in this tender document.

Part -II shall contain Price Bid (to be submitted electronically).

This part shall contain only Schedule of prices duly filled in as per the Bid Proposal Schedules. No physical submission of hard copy is permitted.

5) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

#### 6) METHOD OF SELECTION:

Part-I of the bid will be evaluated and bidders meeting the PQ criteria and other tender conditions will be qualified as eligible bidders for opening of the price bids. The price bids opened subsequently will be scrutinized for responsiveness and IREL shall consider placement of order on the qualified bidder, whose offer shall be overall lowest. However, IREL reserves the right to accept or reject all or any tender without assigning any reasons and does not bind itself to accept the lowest offer.

<u>Note:</u> To assist in the examination of documents submitted by the bidder in support of eligibility criteria (PQ), IREL may, at its discretion, ask the Bidder for clarification of its bid. The request for

clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.

#### 7) SPECIAL TERMS AND CONDITIONS

## 7.1 Site Visit:

Prior to quoting rates, the bidders are advised to visit the site on any working days at our specified visiting hours with the permission of Engineer concerned /Purchase Dept. The bidders are also advised to study the labour supply/availability, trade union practices and labour rates prevailing at Udyogamandal.

## 7.2 **Effect and validity of bid**:

- (i) The submission of any bid connected with these documents and specifications shall constitute an agreement that the bidder shall have no cause of action or claim against IREL for rejection of his bid.
- (ii) The bid shall be valid for a period of 90 days from bid due date.

## 7.3 **Right to reject the Tender:**

- (a) IREL reserves the right to reject any tenders whatsoever without assigning any reason thereof.
- (b) IREL reserves the right to modify/ add/ reduce the scope, either in whole or in part any of the clauses mentioned herein without assigning any reason thereof.

Further IREL, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;

- a. suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
- b. consult with any Bidder in order to receive clarification or further information;
- c. pre-qualify or not to pre-qualify any Bidder and/ or to consult with any Bidder in order to receive clarification or further information;
- d. retain any information and/ or evidence submitted to IREL by, on behalf of, and/ or in relation to any Bidder; and/ or
- e. independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder

#### 7.4. **PRICES:**

Tenders offering firm prices are only acceptable to us. Firm Price shall be quoted as per the price schedule for delivery at designated works. GST as applicable is to be considered as per the Price Schedule of the tender document.

## 7.5. TENDER RATES:

- a) The rates quoted in the price schedule shall be in Indian rupees only. The quoted rates shall be firm throughout the period of Contract including extension of time, if any.
- b) If the bidder submits abnormally low bid in combination with other elements of the bid which raises material concern as to the capability of the bidder to perform the contract at the offered price, the bidder shall be asked to provide detailed price analysis of the bid in relation to the scope, schedule allocation of risk and responsibilities and any other requirements of the bid documents. If the bidder fails to demonstrate its capability to deliver the contract at the offered price the price bid shall be considered un-responsive.
- 7.6 Vendor should be responsible for clearing the waste materials generated during installation work.
- 7.7. The Bidder must quote all the products as per the Tender. Partial Bids will be rejected.

7.8 Organization is the final authority to judge the tender called items and has every power - to accept or reject the same without assigning any reasons

## 7.9 GUIDELINES FOR PROCUREMENT FROM MSEs

Procurement from Micro, Small and Medium Enterprises (MSEs):

- 7.9.1 The Procurement Policy for Micro and Small Enterprises, 2012 [as amended time to time] has been notified by the Government in exercise of the powers conferred in Section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006. In line with Government Policy, the prevailing guidelines in this regard as issued from time to time is to be strictly adhered to.
- 7.9.2 As per the Government notified Public Procurement Policy for Micro & Small Enterprises (MSE), it is mandated that 25% of procurement of annual requirement of goods and services will be sourced from the Micro and Small Enterprises.
- 7.9.3 In tender, participating Micro and Small Enterprises (MSE) quoting price within price band of L1+15 (fifteen) per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 25(twenty-five) per cent of total tendered value. The 25(twenty five) per cent quantity is to be distributed proportionately among these bidders, in case there are more than one MSEs within such price band.
- 7.9.4 Within this 25% (Twenty Five Percent) quantity, a purchase preference of four (4) per cent s reserved for MSEs owned by Scheduled Caste (SC)/ Scheduled Tribe (ST) entrepreneurs and three (3) percent is reserved for MSEs owned by women entrepreneur (if they participate in the tender process and match the L1 price). However, in event of failure of such MSEs to participate in tender process or meet tender requirements and L1 price, four percent sub-target for procurement earmarked for MSEs owned by SC/ST entrepreneurs and three (3) percent earmarked to women entrepreneur will be met from other MSEs.
- 7.9.5 MSEs would be treated as owned by SC/ ST entrepreneurs:
  - a) In case of proprietary MSE, proprietor(s) shall be SC /ST;
  - b) In case of partnership MSE, the SC/ ST partners shall be holding at least 51% (fifty-one percent) shares in the unit;
  - c) In case of Private Limited Companies, at least 51% (fifty-one percent) share shall be held by SC/ST promoters.
- 7.9.6 If subcontract is given to MSEs, it will be considered as procurement from MSEs.
- 7.9.7 In case of tender item cannot be split or divided, etc. the MSE quoting a price within the band L1+15% may be awarded for full/complete supply of total tendered value to MSE, considering the spirit of the Policy for enhancing Govt. Procurement from MSEs.
- 7.9.8 Where any Aggregator has been appointed by the Ministry of MSME, themselves quote on behalf of some MSE units, such offers will be considered as offers from MSE units and all such facilities would be extended to these also.
- 7.9.9 Traders/ distributors/ sole agent/ Works Contract are excluded from the purview of the policy.
- 7.9.10 To reduce transaction cost of doing business, Micro and Small Enterprises is to be facilitated by providing them tender sets free of cost, exempting Micro and Small Enterprises from payment of Earnest Money (EMD), adopting e-procurement to bring in transparency in tendering process. However, exemption from paying Performance Security / Performance Bank Guarantee is not covered under the Public Procurement policy.
- 7.9.11 MSEs may also be given relaxation in prior turnover and prior experience criteria during the tender process, subject to meeting of quality and technical specifications. However, there may be circumstances (like procurement of items related to public safety, health, critical security operations and equipment, etc.) where the vendor having prior experience may be preferred rather than giving orders to new entities.
- 7.9.12 Payment to the MSME vendors is to be made within 30 days from the date of receipt and acceptance of goods/ services.
- 7.9.13 In case Bidder is a Micro or Small Enterprise under the Micro, Small and Medium Enterprises Development Act, 2006, the Bidder is to be asked for submitting the following along with tender:
- 7.9.14 Ministry of MSME has notified criteria for classifying the enterprises as Micro, Small and Medium Enterprises as combination of investment in Plant & machinery or Equipment and Turnover.

Mandatory registration in Udyam Registration Portal for all new and existing MSME has been prescribed. Accordingly, Micro and Small Enterprises (MSEs) shall be required to submit Udyam Registration Certificate for availing benefit.

## 7.9.15 RXIL (TReDS) PLATFORM

IREL is registered with RXIL (TReDS) platform. MSE bidders are requested to get registered with RXIL (TReDS) platform to avail the facility as per the GOI guidelines.

IREL (India) Limited is onboard with TReDS platform of M/s RXIL for facilitating Bill Discounting for MSME's.

As per DPE/7(4)/2007-Fin dt 21/08/2020, it is mandatory to get all the MSME vendors registered on the platform.

Vendors can get themselves registered at: <a href="https://onboarding.rxil.in/customerapp/home.">https://onboarding.rxil.in/customerapp/home.</a>

The registration fees of MSMEs on TReDS Platform is Free of Cost as per the new guidelines provided by SIDBI.

For any registration queries, vendors may please contact,

RXIL Relationship manager Mr. Satyajeet Jathar: +91 99201 00784/+91 9004100784 email: satyajeet.jathar@rxil.in

RXIL Relationship manager Mr Kirti musale: +91 90048 17501 email: kirti.musale@rxil.in

IREL (India) Limited Unit Administrator Mr. R. Abel Devadhason: +91 9443607155 email: purchase-red@irel.co.in

IREL (India) Limited Nodal Officer Mr. K.V.Ramakrishna: +918104997177 email: kvramakrishna@irel.co.in

#### 7.9.16 **MAKE IN INDIA**

7.9.16.1 For this procurement, Public Procurement (Preference to Make in India). Order 2017 dated 15.06.2017, 28.05.2018 & 29.05.2019 and subsequent Orders issued by the respective Nodal Ministry shall be applicable. The bidder to provide certificate for minimum 50% and 20% local content required for qualifying Class 1 and Class 2 Local Supplier respectively. The bidder to provide needful certificate as a proof

# 8.0 RESTRICTION ON PROCUREMENT FROM A BIDDER OF A COUNTRY WHICH SHARES A LAND BORDER WITH INDIA (AS PER GOI GUIDELINES AMENDED FROM TIME TO TIME)

The bidder to provide needful certificate attached.

9.0 IREL reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. IREL also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at contracted rates. Bidders are bound to accept the orders accordingly.

## 10.0 <u>EARNEST MONEY DEPOSIT (EMD)/ BID SECURITY</u>

10.1 Earnest Money Deposit (EMD) is a deposit received from the tenderers in token of their earnestness in submitting their offer to undertake the supplies/works/services/consultancy contracts and conclude a contract if entrusted to them on the basis of their tender.

- 10.2 EMD is to be remitted by way of 'Insurance Surety Bonds' or 'account payee demand draft' or 'fixed deposit receipt' or 'bankers cheque' or 'Bank Guarantee from any scheduled commercial Banks' or "online payment' in favour of IREL. In case of online payment, bidders should submit the UTR no. enabling verification of receipt of the amount.
- 10.3 Government Body/Public Sector Undertakings may be exempted from payment of EMD with the approval of Competent Authority.
- EMD amount in rupee value is to be mentioned as a fixed amount in the tender and not as a percentage of the estimated cost and no interest is payable on the EMD.
- 10.5 EMD shall be exempted to MSEs and Start-ups as per prevailing guidelines in this regard. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD.
- 10.6 EMD is liable to be forfeited if:
- a. The tenderer changes the terms and conditions or prices or withdraw his quotation subsequent to the date of opening/ The tenderer impairs or derogates from the tender in any respect within the period of validity of the tender
- b. The tenderer fails to accept the order when placed or fails to commence supplies/works/services after accepting the order.
- c. In case bidder submits false/fabricated documents. d) In case bidder fails to submit SD as stipulated in the tender.
- 10.7 The offers received from tenderers without EMD and/or tender cost shall be summarily rejected except where an exemption is provided in the tender.
- EMD may be adjusted against security deposit / performance security of the successful bidder. EMD of the unsuccessful bidders should be returned to them at the earliest after expiry of the final bid validity period and latest by the 30th day after the award of the contract. Bid security should be refunded to the successful bidder on receipt of performance security. However, in case of two stage bidding/ 2or 3 envelope bidding, EMD of unsuccessful bidders during first stage i.e. technical evaluation etc. should be returned within 30 days of declaration of result of first stage i.e. technical evaluation etc.
- 10.9 In case where the EMD is provided in form of BG in the prescribed format to be attached with the tender, the BG shall be obtained from a scheduled commercial Bank with validity of 45 days beyond final bid validity period.

## 11.0 <u>SECURITY DEPOSIT (PERFORMANCE SECURITY) OR PERFORMANCE BANK</u> <u>GUARANTEE:</u>

- a) Security deposit (SD) shall be uniformly levied @ 5% of contract value (excluding Taxes) towards satisfactory completion of the order/works as under:
- b) For supply & service contract valued more than Rs.5 lakhs.

  Performance Security is to be furnished by a specified date (generally 14 (fourteen) days after notification of the award) and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier/ contractor, including warranty obligations/ defect liability period (DLP).

  In exceptional cases waiver of SD shall be approved by Competent Authority after recording the reasons for such waiver.

Submission of SD/PBG, if called for in the tender can also be paid through "Insurance Surety Bond or account payee demand draft" or "fixed deposit receipt from a Scheduled Commercial bank" or Bank Guarantee issued/ confirmed from any Scheduled Commercial Banks in India" or online payment to be confirmed sharing Unique Transaction Reference (UTR) to the tender inviting authority as called for in tender. In case of GTE tenders, the performance security should be in the same currency as the contract and must conform to Uniform Rules for Demand Guarantees (URDG 758) — an international convention regulating international securities. In case of JV, the BG towards performance security shall be provided by all the partners in proportion to their participation in the project. Bank Guarantees towards Bid Security/ Security Deposit/ PBG issued by Nationalized Banks/ Scheduled Commercial Banks (other than Cooperative Banks) only acceptable.

EMD/ Bid Security may be adjusted towards SD. However, if EMD is submitted in the form of

Bank Guarantee, fresh Bank Guarantee in the prescribed format or demand draft/ bankers cheque is to be submitted towards SD.

BG format for security deposit is attached.

The SD shall not bear any interest and is liable to be forfeited for unsatisfactory completion or on abandonment of the supply/ work order.

Additional amount of SD due to enhancement in scope of work is also to be batined.

## 12.0 **RETENTION MONEY**

- 12.1 Where in a contract, payment is made on progressive billing of work executed, 5% of the bill value shall be retained at the time of making payment towards rectification/defective work made a s retention money.
- 12.2 The total SD and retention money together towards performance guarantee shall not exceed 10% of the contract value.

#### 13.0 **REFUND OF SD AND RETENTION MONEY**

- a. Before releasing SD or retention money in respect of supplies/works, a "No Due Certificate" shall be issued by EIC/OIC duly countersigned by head of the department after ensuring that no amounts are recoverable from the supplier/contractor.
- b. EIC/OIC shall recommend release of SD and retention money after compliance by the contractor towards guarantee/warranty/performance guarantee & other related clauses as stipulated in the purchase/work order and on submission of formal claim by contractor
- c. On receipt of "no dues certificate" from EIC/OIC, SD or retention money retained in the form of B.G and / or any form shall be refunded at the earliest, if the contractor is not liable to pay any money to IREL (India) Limited under any other contract.

## 14.0 FORFEITURE OF SD & RETENTION MONEY

The SD & retention money shall stand forfeited in favor of IREL (India) Limited, without any further notice to the contractor in the following circumstances:

In case of any failure whatsoever on the part of the contractor at any time during performance of his part of the contract including the extended periods of contract, where notice is given and time for rectification allowed.

If the contractor indulges at any time in any subletting/sub -contracting of any portion of the work without approval of IREL (India) Limited.

## 15.0 REQUIRED DOCUMENTS TO BE SUBMITTED ALONGWITH TECHNO-COMMERCIAL BID.

Sl. No.	Description	Up-loaded Yes/No
1	PROOF OF SUBMISSION OF EMD / VALID EXEMPTION CERTIFICATE (If Applicable).	
2	DOCUMENTS AS PER PRE-QUALIFICATION CRITERIA (Annexure - I).	
3	DULY FILLED, SIGNED AND SEAL AFFIXED IREL TENDER DOCUMENTS (Annexure - II to XI).	
4	COPY OF GST & PAN CERTIFICATES.	
6	ANY OTHER DOCUMENTS AS PER TENDER CONDITIONS.	

# 16.0 CONTACT PERSON OF TENDERING AUTHORITY IREL (INDIA) LIMITED, R E DIVISION, UDYOGAMANDAL, KERALA.

Purpose	Name	E-mail ID	Contact No.
For Bid/tender	Shri. R Abel Devadhason	purchase-red@irel.co.in	0484-2545199
related query	CM-Technical (Purchase)		91 9443607155
For Technical			
Specification / Scope	Shri. K A Joshy	electrical-red@irel.co.in	91 7593880813
of work related	M-Technical (Elecl.)		
Query			
For	Shri. Sanjaykumar Vind	stores-red@irel.co.in	91 8301997625
Consignment/Goods	SM-Technical (Stores)		
Transportation			
related Query			
For Payment/refund	Smt. P Kamalam	finance-red@irel.co.in	91 8593994144
rel ated Query	DGM (Finance)		

#### PRE -QUALIFICATION CRITERIA (PQC)

## 1.0 TECHNICAL COMPETENCY

The bidder must have successfully commissioned at least one projects/systems having similar installation of minimum 48 kWp capacity in last 7 years as on 31.12.2023, and must be in satisfactory operation for at least one (1) year.

#### OR

The bidder must have successfully commissioned at least two projects/systems having similar installation of minimum 30 kWp capacity in last 7 years as on 31.12.2023, and must be in satisfactory operation for at least one (1) year.

#### OR

The bidder must have successfully commissioned at least three projects/systems having similar installation of minimum 24 kWp capacity in last 7 years as on 31.12.2023, and must be in satisfactory operation for at least one (1) year.

Similar installation means Supply, Installation, Testing, Obtaining clearance & energisation approval and commissioning of grid connected solar power system of capacity 24 kWp or above.

21.3. Bidder shall upload the copy of work/purchase orders and Completion certificate/copy of invoice etc. as proof of execution of the work.

#### 2.0 FINANCIAL CAPACITY

- 2.1 Minimum Average Annual Turnover for the last three years (2020-21, 2021-22 & 2022-23) should not be less than 15 Lakhs.
- 2.2 To verify the turnover, the bidder shall submit self-attested copies of the Audited Profit & Loss statement for the last three financial years ending on 31st March 2023.

#### 3.0 OTHER ELIGIBILITY CRITERIA

- 3.1. The bidder must not have been debarred / blacklisted by any Govt. Dept., agency, PSUs / institution / agencies / autonomous organizations. The bidder shall submit a self-certification by an authorized person duly notarized to this effect.
- 3.2. Bidder shall submit relevant certificates to fulfill the eligibility criteria prescribed in the tender document along with following documents/information.
- 3.3. Bidder's Information Sheet
- 3.4. Product technical specifications.
- 3.5. Standards maintained for various components to be used in the project.
- 3.6. Safety consideration for system protection
- 3.7. Warranty certification of equipments/ components

The Bidder is expected to verify all instructions, forms, terms and specifications in the Tender Document. Failure to furnish all information required in the tender document will be at the Bidder's risk and may result in rejection of the bid.

## 4.0 SITE VISIT IS MANDATORY

4.1 The bidders are advised to inspect the site before submitting their quotation. Interested bidders shall visit the site & carryout the survey on any working days at our specified visiting hours. Bidder shall upload the site visit certificate duly signed by the IREL, RED officials indicating that

	rejected out rightly.
4.2	The bidders also advised to study the labour supply / availability, trade union practices and labour rates prevailing Udyogamandal.

the survey is carried out by the bidder. The tender submitted without site visit certificate will be

#### **SPECIAL CONDITIONS OF CONTRACT (SCOC)**

#### **BACKGROUND**

IREL (India) Limited (Formally Indian Rare Earths Limited) Rare Earths Division Udyogamandal, Kerala is a central PSU Category 1, is presently processing rare chloride flakes to high pure rare earths (HPRE) compounds and its value addition operations. Rare Earths Division is having five transformers of rating 11/0.415 KV, 500 KVA, with a total connected load of 3500 KW and maximum contract demand of 800 KVA. In addition to this we have 320 KVA DG set as standby power supply unit. IREL, RED is already having 120 kWp (2 sets of 60kWp) grid connected solar power plant in service. It is intended to go for another 60 kWp grid connected solar power plant through this tender.

## 1.0 SCOPE OF CONTRACT

- 1.1. The broad scope of the work (not limited to)includes Design, Obtaining No Objection Certificate (NOC)/Permission/Approval from Distribution Company (CEA & KSEB) for grid connectivity, Supply, Packing and forwarding, transportation all the materials up to project site, loading & unloading, storage in safe custody at site, Civil & structural works, Carrying out preliminary tests at site, Installation, Performance testing and commissioning of Grid Connected 60 kWp Solar PV System at the Security-Dispensary Building roof top at IREL, RED, Udyogamandal.
- 1.2. Connection to net metering facility at our 11/0.440KV substation of IREL, RED, Udyogamandal or the location identified by the Power Distribution Company (CEA & KSEB) for grid connectivity.
- 1.3. The successful contractor shall take all permits, approval, license, Insurance etc. as applicable from the concerned authorities as per the procedure Distribution Company (CEA & KSEB).
- 1.4. The successful contractor shall carry out the operation and maintenance of the systems including supply of spares and consumables required if any during for **a period of 5 years** after commissioning, i.e during the warranty period. The operation & maintenance of Solar Photovoltaic Power Plant would include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective SPV modules, invertors / Power Conditioning Unit (PCU), spares, consumables & other parts for a period of 5 years. SPV modules shall be surface cleaned once in six month without charging extra cost. During the period the bidder shall undertake scheduled maintenance as well as breakdown maintenance without fail.
- 1.5. The successful contractor shall take AMC for the 5 years (i.e after completing warranty period and from 6<sup>th</sup> year to 10<sup>th</sup> year) on chargeable basis. Spares for the maintenance work during the AMC period shall be provided either by IREL, RED on free of cost or shall be supplied by the bidder on chargeable basis. During the period the contractor shall undertake scheduled maintenance as well as corrective maintenance without fail. Scheduled maintenance shall be carried once in three month, irrespective of the no. of breakdown maintenance.
- 1.6. Successful contractor shall submit single line diagram for the plant indicating all wiring details, connecting details, array layout drawings along with shadow analysis report to IREL, RED before commencement of installation work.
- 1.7. The successful contractor shall, on behalf of IREL, take necessary action through IREL for obtaining the required feasibility report, approval/permissions for the installation of solar power plant and its registration including connectivity in NET metering from respective distribution utility department (Feasibility and registration fee shall be made by IREL, RED). The successful contractor should facilitate submission of all required applications on behalf of IREL and follow up and Liasoning for obtaining NOC for Net metering, Grid connectivity, Energization etc. for the completion of the work.
- 1.8. On Grid Tied Rooftop Solar power plant consists of :-
- 1.8.1. Mono Crystalline Solar Photo Voltaic (SPV) modules array,
- 1.8.2. Module Mounting Structure,
- 1.8.3. Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), Inverter, and Controls, metering & Protections, interconnect cables, Junction boxes and switches.

- 1.8.4. Earthing and lightening protections.
- 1.8.5. IR/UV protected PVC Cables, pipes, Hardware and accessories, etc.
- 1.8.6. All these hardware should conform to the BIS or IEC or international specifications.
- 1.9 Grid tied Rooftop Solar power plant without battery and shall be designed with necessary features to supplement the grid power during day time.
- 1.10. The contractor shall ensure installation of NET Meter/connectivity/Energization in coordination with Division/Sub Divisional offices of respective Govt. Departments. The testing and synchronization of Net Meter shall be ensured by the Bidder in coordination with TMR & Divisional office of respective Govt. Departments before Commissioning of the system. Net-meter must be tested & approved by respective Govt. Departments or other agencies as applicable.
- 1.11. Any accessories/components/materials etc. which have not been specifically mentioned in this Contract but which are necessary for the completeness of the project in all respect shall be provided by the contractor without any extra cost and within the time schedule and for efficient and smooth operation and maintenance of the SPV plant.

#### 2.0 SOLAR PHOTOVOLTAIC MODULES

- 2.1. The Modules convert the sunlight reaching the panel into DC Power. The amount of power they produce is roughly proportional to the intensity and the angle of the light reaching them. *Contractor* has to ensure the proper positioning of the Modules to take maximum advantage of available Sunlight within site constraints with the Sun's movements during the day.
- 2.2. The solar PV modules shall consist of required number of Mono crystalline PERC PV Modules (IREL reserves the right to have the modules tested in its presence prior to dispatch). The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-2- requirements for construction & Part 2 requirements for testing, for safety qualification or equivalent IS.
- 2.3. Contractor shall follow the latest Engineering Practice; ensure long-term compatibility requirements and continuity of equipment supply and the Safety of the Operating Staff.
- 2.4. Contractor is required to optimize generation of electricity in terms of kWh generated with available Solar Radiation at the site (may be obtained through use of efficient electronics components, lower cable losses, maximization of power transfer from PV Modules to Converter and the Grid etc).
- 2.5 The Solar power plant Systems shall support Remote Monitoring of important Parameters. The system shall be designed such that personnel without any background knowledge in Microprocessor-based Technology are able to operate the System. The operator interface shall be such that operating personnel shall be able to operate the system easily after having received some basic training.
- 2.6. The Manufacturer shall arrange Certification on Qualification of PV Modules.
- 2.7. The SPV Cells shall be manufactured using unique highly efficient diffusion process or any other technology so as to ensure uniform diffusion profiler to achieve close spread and higher efficiency for each cell.
- 2.8. Stabilized net output of the Solar PV Array for the Solar Power System should not be less than the Nominal design level for the System under Standard Test Condition.
- 2.9. Each Solar PV Module shall be warranted by the Manufacturer for at least 90% of its rated power for 10 Years from the date of System acceptance.
- 2.10. The Contractor shall provide the sample Solar PV Module electrical characteristics including current-voltage (I-V) performance curves and temperature co-efficient of power, voltage and current. However, the tabulated document with all the relevant data like voltage, current, power output for all the modules also to be provided.
- 2.11. The PV Modules shall be suitable for continuous outdoor use.
- 2.12. The PV Module shall be made of high quality laminated in ultraviolet stabilized polymer material such as Ethyl Vinyl Accelerate (EVA), Tedler, and toughened glass. The size of single crystalline silicon PV Cells shall be so chosen so as to maximize energy density and align with economies of scale.

- 2.13. PV Module shall be provided with frame of anodized channels for size and simplicity in installation offered as a single module or series parallel combination of modules. The PV Module shall be provided with screen-less frame with Solar Cable and Connector.
- 2.14. Since the PV modules is erected in a corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701. The PV modules shall also be capable of resisting heavy wind load of 150 KM/Hr.
- 2.15. The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 540 Wp and above wattage.
- 2.16. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- 2.17. PV modules must be with test certificate from the manufacturer and approval certificate from MNRE/IEC authorized test centers and the test certificate shall be provided along with the supply of PV module.
- 2.18. The module frame shall be made of corrosion resistant materials, preferably having 4 dip anodized aluminum.
- 2.19. The Contractor shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his bid.
- 2.20. Other general requirement for the PV modules and subsystems shall be the Following:
- 2.20.1. The rated output power of any supplied module shall have tolerance of +/-3% max
- 2.20.2. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2% from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
- 2.20.3. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall be weather proof having hinged, lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
- 2.21. Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
- 2.21.1. Name of the manufacturer of the PV module
- 2.21.2 Name of the manufacturer of Solar Cells.
- 2.21.3. Month & year of the manufacture (separate for solar cells and modules)
- 2.21.4. Country of origin (separately for solar cells and module)
- 2.21.5. I-V curve for the module Wattage, Im, Vm and FF for the module
- 2.21.6. Unique Serial No and Model No of the module
- 2.21.7. Date and year of obtaining IEC PV module qualification certificate.
- 2.21.8. Name of the test lab issuing IEC certificate.
- 2.21.9. Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.
- 2.22. The positioning or tilting of solar panels shall be according to the shade analysis to movement of sun above the region.

#### 3.0 **ARRAY/MODULE MOUNTING STRUCTURE**

Module mounting structures shall meet the following specification:

- 3.1 Hot dip galvanized (80 microns and above) GI mounting structures of Tata steel or Apollo may be used for mounting the modules/ panels/arrays. (**Test certificate for the 80Micron thickness shall be provided by the party at the time of supply of structural materials for the clearing the payment part.)**
- 3.2 The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.
- 3.3 Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, and nuts & bolts (SS Fasteners). Necessary protection towards rusting need to be provided either by coating or anodization. The structural materials shall be painted with 2 coat corrosion resistant paint.

- 3.4 Structures also can be used which can withstand the wind speed of respective wind zone roughly 150kM/ hour.
- 3.5 Special care should be taken while designing all structures for modules to cater to heavy rainfall.
- 3.6 Each structure should have angle of inclination as per the site conditions to take maximum duration for the fall of sun light. However to accommodate more capacity the angle inclination may be reduced until the plant meets the specified performance ratio requirements.
- 3.7 PV modules shall be secured to support structure using screw fasteners and/or metal clamps. Screw fasteners shall use existing mounting holes provided by module manufacturer. No additional holes shall be drilled on module frames
- 3.8 Adequate spacing shall be provided between any two modules secured on PV array for improved wind resistance.
- 3.9 The fasteners used should be made up of **stainless steel**. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- 3.10 Regarding civil structures the bidder need to take care of the load baring capacity of the roof and need arrange suitable structures based on the quality of roof.
- 3.11 The structures should be laid on the rooftop and proper drainage of rain water over terrace through the installation area should be maintained.
- 3.12 The structures (lugs) should be suitably loaded with reinforced concrete blocks of appropriate **size**300mm x 300mm x 300mm cubical shape with M25 concrete mixture. Waterproofing shall be provided in the areas where RCC blocks are placed on the terrace
- 3.13 The minimum clearance of the structure from the roof level should be sufficient to allow ventilation for cooling, also ease of cleaning and maintenance of panels as well as cleaning of terrace.
- 3.14 The array shall be located sufficiently inside the boundary wall of the terrace (parapet wall) and should not be projecting out. PV array shall be installed in the terrace space free from any obstruction and/or shadow. PV array shall be installed utilizing optimum terrace space to minimize effects of shadows due to adjacent PV panel rows.
- 3.15 Adequate spacing shall be provided between two panel frames and rows of panels to facilitate personnel protection, ease of installation, replacement, cleaning of panels and electrical maintenance etc.
- Each array may be provided with two bird repellents spikes at a level higher than the upper edge of the array. The location of the spike should be selected for minimum shadow effect.

#### 4.0 ARRAY/ MAIN JUNCTION BOXES (JBs)

- 4.1 The Junction Boxes (JBs) made of **GRP/FRP/with full dust, water & vermin proof** arrangement shall be provided. All wires/cables shall be terminated through Copper cable lugs. The JBs shall be such that input & output termination can be made through suitable cable glands.
- 4.2 Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208. Hinged door with EPDM rubber gasket to prevent water entry. Single/double compression cable glands for the cables..
- 4.3 MCB protection shall provided for each string for +ve cables.
- 4.4 Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs)/SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.
- 4.5 Suitable markings shall provided on the bus bar for easy identification and suitable cable glands with ferrules must be fitted at the cable termination points for identification.
- 4.6 Array Junction Box shall **IP 65(for outdoor& indoor)** as per IEC 60529 and shall be provided with fuses and Isolators of suitable ratings.
- 4.7 ACDB shall have surge protection device of class 2 as per IEC 60947/60364-5-53, to protect inverters from surges in the AC line.
- 4.8 AJBs/MJB may be kept below the modules. In case of need this can be installed on wall or rooftop. ACDB shall put at safe distance from DCDB/AJBs/MJBs to avoid Eddy current interference.

## 5.0 <u>DC DISTRIBUTION BOARD</u>

- 5.1 Dust & vermin proof Enclosures of Polycarbonate/GRP/FRP/Powder coated Aluminium/ Cast Aluminium Alloy and shall have **IP 65(outdoor &indoor)** compliant to IEC 60529.
- 5.2 The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall provided for controlling the DC power output to the PCU along with necessary surge arrestors.
- 5.3 Suitable cable entry points with cable glands and ferrules shall be provided.
- 5.4 DC SPD of type 2 compliant to IEC 60497 with fuse shall be provided.
- 5.5 Design ambient temperature shall be 0-60 deg. C.

#### 6.0 AC DISTRIBUTION PANEL BOARD

- 6.1 AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and shall have necessary over current & surge protection.
- All switches and the circuit breakers, connectors shall conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air insulated, cubical type suitable for operation on three phase/single phase, 415/230 volts, 50 Hz.
- 6.4 The changeover switches, cabling work shall undertaken by the bidder as part of the project.
- 6.5 Suitable cable entry points with cable glands and ferrules shall provided.
- 6.6 DC SPD of type 2 compliant to IEC 60497 with fuse shall provide.
- 6.7 Design ambient temperature should be 0-60°C. 95 percent humidity and dusty weather.
- 6.8 All panel boards shall be **of IP 65 protections**.
- 6.9 All panels shall confirm to Indian Electricity Act & rules (till last amendment)
- 6.10 All the 415 V or 240 V devices/ equipment like bus support insulators, circuit breakers, SPDs, VTs, etc. mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions
- 6.10.1 Variation in Supply Voltage +/- 5% max
- 6.10.2 Variation in Supply frequency+/- 2 Hz max
- 6.11. All DC and AC switch gears shall be of the make L&T/Seimens/ Schneider/Eton

#### 7.0 GRID TIED POWER CONDITIONING UNIT/INVERTER

- 7.1 The DC power produced is fed to **String Inverter** for conversion into AC. In a grid interactive system, AC power shall be fed to the grid at three phase 415/400VAC bus. Power generated from the solar system during the day time is utilized fully by powering to the grid as long as grid is available.
- 7.2 The output of the inverter must synchronize automatically it's AC output to the exact AC voltage and frequency of the grid.
- 7.3 Inverter shall continuously monitor the condition of the grid and in the event of grid failure, the inverter automatically switches to off-grid supply within a cycle. The solar system is resynchronized with the grid within two minutes after the restoration of grid or DG set.
- 7.4 Grid voltage shall also be continuously monitored and in the event of voltage going below a preset value and above a preset value, the solar system shall be disconnected from the grid within these time.
- 7.5 Metal Oxide Varistors (MOVs) shall also be provided on DC and AC side of the inverter.
- 7.6 The inverter control unit shall be so designed so as to operate the PV system near its Maximum Power Point (MPP), the operating point where the combined values of the current and voltage of the solar modules result in a maximum power output.
- 7.7 The inverter shall be at pure sine wave inverter for grid interactive PV system.
- 7.8 Following shall also be displayed Protective function limits (AC over voltage, AC under voltage, Over frequency, under frequency, ground fault, PV starting voltage, PV stopping voltage, over voltage delay, under voltage delay over frequency, ground fault delay, PV starting delay, PV stopping delay.)
- 7.9 The inverter enclosure shall have to be adequately protected taking into consideration the atmosphere and weather prevailing in the area.

- 7.10 All doors, covers, panels and cable exit shall be provide with gasket or otherwise designed to limit the entry of dust and moisture. All doors shall be equipped with locks.
- 7.11 The system should automatically "WAKEUP" during day time and "SLEEP" during night.
- 7.12 An energy meter shall be installed in between the solar grid inverter and the building distribution board to measure gross solar AC energy production ("the solar generation meter")
- 7.13 Operation Mode:
- 7.13.1 Night or Sleep Mode: where the Inverter is almost completely turned off, but control system and time shall be still in operation, losses shall be less than 2 W per 5kW.
- 7.13.2 Standby Mode: Where the control system continuously monitors the output of the solar generator until pre-set value is exceeded (typically10W).
- 7.13.3 MPP tracking mode: The control system continuously adjust the voltage of the generator to optimize the power available. The power conditioner shall automatically re-enter standby mode as input power reduces below the standby mode threshold. Front panel shall provide display of status of the inverter.
- 7.14 The Power-Conditioning Unit (PCU) should contain a Maximum Power Point Tracker (MPPT), Grid side Converter and Grid side Filter.
- 7.15 The PCU must automatically synchronize with the grid and shall shutdown in case off and very low power generation, and wake-up automatically from shutdown. The power conditioning unit/inverter shall also be DG set interactive. Inverter output should be compatible with the grid frequency.
- 7.16 Typical technical features of the **String inverter** shall be as follows:
- 7.16.1 Switching devices: IGBT/MOSFET
- 7.16.2 Control: Microprocessor type (DSP)
- 7.16.3 Nominal AC output voltage and frequency:: 415V, 3 Phase, 50 Hz
- 7.16.4 Grid Frequency Synchronization range: +/- 2 Hz
- 7.16.5 Ambient temperature considered: 0°C to 60 °C
- 7.16.6 Humidity: 95% non-condensing
- 7.16.7 Protection of enclosure IP 20(Min) for indoor & IP 65 for Outdoor.
- 7.16.8 Grid frequency tolerance range: within +/- 3Hz
- 7.16.9 Grid voltage tolerance: -20 %,+15%
- 7.16.10 No load losses: less than 1% of rated power
- 7.16.11 Inverter efficiency: 98% or above
- 7.16.12 MPPT efficiency: 98 or above
- 7.16.13 THD: < 3%
- 7.16.14 PF: >0.98 at normal power
- 7.17 PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- 7.18 The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power. Inverter shall have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
- 7.19 Built-in meter and data logger to monitor plant performance through external computer shall be provided.
- 7.20 The power conditioning units/inverters shall comply with applicable IEC/equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068-2(1, 2, 14, 30) / Equivalent BIS Std.
- 7.21 The charge controller (if any)/MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/enclosures should be IP 65(for outdoor & indoor) and as per IEC 529 specifications.

## 8.0 **INTEGRATION OF PV POWER WITH GRID**

The output power from SPV shall be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV system shall be out of synchronization and shall be disconnected from the grid. Once the DG set comes into service PV system shall again be synchronized with DG supply and load

requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided

## 9.0 **PROTECTION**

9.1 The SPV power plant should be provided with Lightening and over voltage protection, connected with proper earth pits. The main aim of over voltage protection is to reduce the over voltage to a tolerable level before it reaches the PV or other sub-system components. The source of over voltage can be lightning or other atmospheric disturbance.

#### 9.1.1 **LIGHTNING PROTECTION**

- 9.1.1.1 The lightning arrestor shall be made of minimum 20 mm diameter x 1000 mm long x 100micron, Nickel sealed copper bonded rod with copper spike as per provisions of IS 2309-1969. Necessary concrete/structural foundation for holding the lightning arrestor in position shall be made after giving due consideration to maximum wind speed. The lightning arrestor shall be earthed through 25 mm X 3 mm thick copper flat to earth pits/earth bus with proper Insulation. Height of Lightening arrestors from Array Structure should beminimum4metres.
- 9.1.1.2 Most areas of the State being prone to lightening, Type-II SPDs shall be included as a mandatory requirement.
- 9.1.1.3 Similarly Type I+II SPD shall also be provided on the grid side in ACDB or PCU to protect the PCU from damage.

## 9.1.2 **EARTHING PROTECTION**

- 9.1.2.1. Each array structure of the PV yard shall be grounded/ earthed properly as per IS:3043-1987. In addition the lighting arrester, solar power plant/masts shall also be earthed inside the array field. Earth Resistance shall be tested in presence of IREL as and when required after earthing by calibrated earth tester. PCU, ACDB, DCDB, lighting arrestors should also be double earthed separately as per the guide lines of KSEBL.
- 9.1.2.2. Earth resistance shall not be more than 1 Ohm. It shall be ensured that all the earthing points are bonded together to make them at the same potential.
- 9.1.2.3. Earthing rod 16 mm diameter x 1200 mm long x 250microns with tinned & pressed terminals.

#### 9.1.3 **SURGE PROTECTION**

- 9.1.3.1 Internal surge protection shall consist of surge-arrestors connected from +ve and -ve terminals to earth (via Y arrangement)
- 9.1.3.2 Surge protection device should be provided on both the DC side and the AC side of the solar PV system. It should have protection voltage of 2.5 kV & Nominal Discharge current of 5 kA (8/20)  $\mu$  sec.
- 9.1.3.3 The DC surge protection devices (SPDs) should be installed in the DC distribution box adjacent to the solar inverter.
- 9.1.3.4 The AC SPDs shall be installed in the AC distribution box adjacent to the solar inverter.
- 9.1.3.5 The SPD's earthling terminal should be connected to earth through the abovementioned dedicated earthling system.
- 9.1.3.6. SPDs shall be of the make Mersen/Elton/ Schneider/Seimens

## 9.1.4 **GRID ISLANDING**:

9.1.4.1 In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding

- protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.
- 9.1.4.2 A manual disconnect 4pole isolation switch beside automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

#### 9.1.5 **REVERSE POWER RELAY**:

Reserve Power Relay (RPR) shall be provided in the solar line to protect the standby energy source from the flow of energy in the reverse direction. RPR shall be installed in the solar meter panel for automatic isolation of the isolator switch installed in the metering panels during flow on energy in the reverse direction.

## 10.0 CABLES & WIRINGS

- 10.1 The Cable & Wires shall comply to IEC60227 or IS694 & IEC60502 or IS1554 BSEL50618 (for DC cables for PV systems).
- 10.2 All copper flexible cables shall comply to IS651 and make should be Lapp, Polycab.
- 10.3 Colour code shall be followed for over all wiring i.e, red for positive, black for negative, green for earth.
- 10.4 All cable shall run in suitable PVC Conduits. No cable shall be directly exposed to sunlight.
- 10.5 Cable Sizes should be as per the given Current and Voltage ratings.
- 10.6 Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire solar system to the minimum. The cables (as per IS) shall be insulated with a special grade PVC compound formulated for outdoor use.
- 10.7 Cable Routing/ Marking: All cable/wires shall be routed in a GI/PVC/FRP cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- 10.8 The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%.
- 10.9 The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

#### 11.0 **REMOTE MONITORING SYSTEM**

- 11.1 Data Acquisition System shall be provided for the solar PV plant.
- Data Logging Provision for system parameters, plant control, monitoring time of operation, energy generation Co2 saved, performance ration etc shall be provided.
- 11.3 Solar Irradiance: An integrating Pyranometer / Solar cell based irradiation sensor (along with calibration certificate) provided, with the sensor mounted in the plane of the array. Readout integrated with data logging system.
- 11.4 Temperature: Temperature probes for recording the Solar panel temperature and/or ambient temperature to be provided complete with readouts integrated with the data logging system
- 11.5 The following parameters are accessible via the operating interface display in real time separately for solar power plant:
- 11.5.1 AC Voltage.
- 11.5.2 AC Output current.
- 11.5.3 Output Power
- 11.5.4. Power factor.
- 11.5.5 DC Input Voltage.
- 11.5.6 Input Current.
- 11.5.7 Time Active.
- 11.5.8 Time disabled.
- 11.5.9 Times Idle.

- 11.5.10 Power produced
- 11.6 Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage.
- 11.7 All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values previous values for up to a month and the average values) shall be made available for energy auditing through the internal microprocessor and shall be read on the digital front panel.
- 11.8 PV array energy production: Digital Energy Meters to log the actual value of AC/ DC voltage, Current & Energy generated by the PV system provided. Energy meter along with CT/PT should be of 0.5 accuracy class.
- 11.9 Computerized DC String/Array monitoring and AC output monitoring shall be provided as part of the inverter and/or string/array combiner box or separately.
- 11.10 String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.
- 11.11 Computerized AC energy monitoring shall be in addition to the digital AC energy meter.
- 11.12 The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular and graphical form.
- 11.13 All instantaneous data shall be shown on the computer screen.
- 11.14 Software shall be provided for USB download and analysis of DC and AC parametric data for plant.
- 11.15 Provision for Internet monitoring and download of data shall be also incorporated.
- 11.16 Remote Server and Software for centralized Internet monitoring system shall be also provided for download and analysis of cumulative data of all the plants and the data of the solar radiation and temperature monitoring system.
- 11.17 Ambient / Solar PV module back surface temperature shall be also monitored on continuous basis.
- 11.18 Simultaneous monitoring of DC and AC electrical voltage, current, power, energy and other data of the plant for correlation with solar and environment data shall be provided.
- 11.19 Remote Monitoring and data acquisition through Remote Monitoring System software at IREL with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and operation and maintenance/control to be ensured by the supplier. Provision for interfacing these data on IREL server and portal in future shall be kept.

#### 12.0 **NET METER**

- 12.1 IREL, RED is already connected through NET meter for the existing 120 kWp (2 sets of 60kWp) connected solar power plant. Further connectivity/modification required for connection of the new 60 kWp power will be in the scope of the bidder subjected to the approval/sanction from CEA & KSEBL.
- 12.2 If not the approval/sanction from CEA & KSEBL, The bidirectional electronic energy meter (HT NET meter, 0.5Sec. class) shall be installed for the measurement of import/Export of energy.
- 12.3 The Contractor must take approval/NOC from the Concerned KSEB for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to IREL before commissioning of SPV plant.
- 12.4 Reverse power relay shall be provided by contractor (if necessary), as per the local KSEB requirement. The On-grid solar power plant will be connected to the grid through a net meter as per the single line diagram indicated in this document. The indicative specification of the Net-meter is as follows:

#### 13.0 **GENERATION METER**

As suggested by the KSEB, Three Phase Four wire, 3 x 240VAC, 20-100Amps ISI marked Direct current operated Energy Meter, DLMS Cat C having calibration LED, AMR compliance & front sealing facility to be used as generation meter up to 20KW with Accuracy:1.0.GPRS/GSM Modem with connecting cable & antenna for running smoothly up to 10 year for AMR facility.

## 14.0 **DISPLAY BOARD**

- Display board of size 3 ft x 3 ft that gives detailed circuit diagram of the system with its description should be provided.
- Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date. Text of the signage may be finalized in consultation with IREL.

#### 15.0 **SPARES LIST**

A list of requisite spares in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes. Fuses, MOVs / arrestors, MCCBs etc. along with spare set of PV modules be indicated, which shall be supplied along with the equipment

## 16.0 DRAWINGS & MANUALS

- 16.1 Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be provided to IREL, RED.
- 16.2 Bidders shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid along with basic design of the power plant and power calculations, synchronization along with protection equipment.
- 16.3 Approved ISI and reputed makes for equipment be used.
- 16.4 For complete electro-mechanical works, bidders shall supply complete design, details and drawings to be submitted to IREL
- 16.5 The following shall be submitted to EIC along with the final bill for the certification and recommendation of bill submitted.
- 16.5.1 Single Line Diagram for the plant indicating all wiring details, connecting details.
- 16.5.2 Array layout drawings along with shadow analysis report.
- 16.5.3 Commissioning report
- 16.5.4 Catalogues of critical components
- 16.5.5 JCC
- 16.5.6 Warranty certificate/Warrantee certificates issued for major components by OEMs
- 16.5.7 I-V Curves of Solar modules
- 16.5.8 Operation manual
- 16.5.9 Dos & Don'ts in the form of a booklet
- 16.6. Following drawings shall be submitted by contractor after placement of LOA/work order.
- 16.6.1. General Arrangement of System (GAD)
- 16.6.2. Part drawing of structures
- 16.6.3. Complete Electric drawing of system (detailed SLD)
- 16.6.4. Weight analysis of system
- 16.6.5. Civil foundation drawings
- 16.6.6. Wind Speed withstand capacity certificate duly certified by chartered engineer
- 16.6.7. Agreement to undertake Operation and Maintenance for a period of 10 years (First five years under performance warranty period and remaining five years under the AMC period).

#### 17.0 STANDARDS / CERTIFICATES

17.1. The goods supplied and works executed under this contract shall confirm to the standards mentioned in the technical specification and where no applicable standard is mentioned, the latest version of Indian Standard Institution or Bureau of Indian Specification shall be applicable. 17.2. The Bidder shall submit all the valid test certificates and reports of the system components following the latest MNRE Guidelines and the same components shall be supplied for which the test reports/ certificates are submitted.

- 17.3. The work shall be carried out in the best workman like manner in conformity with this specification, the relevant specifications/codes of practice of Indian Standard Institution, approved drawings and instructions of the Engineer-in-Charge or his authorized representative issued from time to time. In case of any conflict between the standards, the instructions of Engineer-in-Charge of IREL, RED shall be binding.
- 17.4. Quality certification and standards for grid-connected solar Roof Top Net Metering PV systems are essential for the successful mass-scale implementation of this technology. It is also imperative to put in place an efficient and rigorous monitoring mechanism, adherence to these standards. Hence, all components of grid-connected solar Ground Mounted Net Metering PV systems/ plant must conform to the relevant standards with latest revisions and certifications given below:

Solar PV Modules/Panels	
IEC 61215/ IS 14286	Design Qualification and Type Approval for Crystalline Silicon
120 01210/ 10 11200	Terrestrial Photovoltaic (PV) Modules.
IEC61701	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853- Part 1 /IS 16170: Part 1	Photovoltaic (PV) module performance testing and energy rating-:
	Irradiance and temperature performance measurements, and
	power rating.
IEC62716	Photovoltaic (PV) Modules - Ammonia (NH3) Corrosion Testing
	(As per the site condition like dairies, toilets).
IEC61730-1,2	Photovoltaic (PV) Module Safety Qualification - Part 1:
	Requirements for Construction, Part 2: Requirements for Testing.
Solar PV Inverters	
IEC62109-1, IEC62109-2	Safety of power converters for use in photovoltaic power systems
	- Part 1: General requirements, and Safety of power converters for
	use in photovoltaic power systems Part 2: Particular requirements
	for inverters. Safety compliance (Protection degree IP 65 for
	outdoor mounting, IP 54 for indoor mounting).
IEC/IS 61683 (as applicable)	Photovoltaic Systems - Power conditioners: Procedure for
	Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading)
IEC 62116/UL1741/ IEEE1547(as	Utility-interconnected Photovoltaic Inverters-Test Procedure of
applicable)	Islanding Prevention Measures
IEC60255-27	Measuring relays and protection equipment - Part 27: Product
HECKOOKO O (HECK KOOOO /	safety requirements.
IEC60068-2 /IEC 62093 (as	Environmental Testing of PV System-Power Conditioners and
applicable)	Inverters
Fuses	Consumit safety requirements for compostory quitables singuit
IS/IEC 60947(Part 1, 2	General safety requirements for connectors, switches, circuit
&3),EN50521	breakers(AC/DC): a) Low-voltage Switchgear and Control-gear, Part1: General rules b) Low-Voltage Switchgear and Control-gear,
	Part2:CircuitBreakers c) Low-voltage switchgear and Control-
	gear,Part3:Switches, dis- connectors, switch-dis-connectors and
	fuse-combination units d) EN 50521: Connectors for photovoltaic
	systems – Safety.
IEC 60269-6	Low voltage fuses,
	part 6:Supplementary requirements for fuse-links for the
	protection of solar photovoltaic energy systems.
Surge Arrestors	1 0, 7
BFC17-102:2011	Lightening Protection Standard
IEC 60364-5- 53/ IS15086-5	Electrical installations of buildings-Part5-53: Selection and erection
	of electrical equipment-Isolation, switching and control.
IEC61643-11:2011	Low-voltage surge protective devices-Part11:Surge protective
	devices connected to low-voltage power systems-Requirements.
Cables	

IEC 60227/IS694, IEC60502/IS1554	General test and measuring method for		
(Part1 &2)/IEC69947 (as	PVC(Polyvinylchloride)insulated cables (for working voltages up		
applicable)	to and including 1100V, and UV resistant for outdoor installation)		
11 /			
BSEN50618	Electric cables for photovoltaic systems (BT(DE/NOT)258), mainly		
	for DC Cables.		
Earthing / Lightning			
EC 62561 Series (Chemical	IEC 62561-1 Lightning protection system components(LPSC)-		
earthing) (as applicable)	Part1: Requirements for connection components IEC62561-2		
3	Lightning protection system components (LPSC) - Part 2:		
	Requirements for conductors and earth electrodes IEC62561-7		
	Lightning protection system components (LPSC) - Part 7:		
	Requirements for earthing enhancing compounds.		
	requirements for curtaining criticationing compounds.		
Junction Boxes			
IEC 60529	Junction boxes and solar panel terminal boxes shall be of the		
	thermo-plastic type with IP 65 protection for outdoor use, and IP		
	54 protection for indoor use.		
Energy Meter	<u> </u>		
IS 16444 or as specified by the	A.C. Static direct connected watt-hour Smart Meter Class 1 and		
DISCOMs	2 — Specification (with Import & Export/Net energy		
DIOCOIVIS	measurements).		
Color DV Doof Mounting	measurements).		
Solar PV Roof Mounting			
Structure			
IS 2062/ IS 4759	Material for the structure mounting.		

Note- Equivalent standards may be used for different system components of the plants

## 18.0 **WARRANTY**

The complete 60Kwp solar power plant shall be under warranty for 5 years for its trouble free operation to the desired output, from the date of Commissioning and Acceptance of the solar power plant. It should covered all the Manufacturing defects, Spare Parts, Worn out Parts, Electrical & Electronic Equipments /Components and Service charges, etc. during the warranty period, apart from the specific unit warranty.

18.1.1	Solar panel	: 10 years
18.1.2	PCU and electronic components/systems	: 5 years
18.1.3	Electrical components/systems	: 2 Years

## 19.0 **PENALTY**

As per MNRE standards, solar power plant shall generate 4Kwh/KW/Hr under standard operating conditions. The performance ratio (PR) of the plant during the operation and maintenance period shall be evaluated on annual basis. If the plant fails to achieve the minimum requirement of 75% performance ration, pro rata reduction in the bills shall be done using the following formula.

PR = Actual reading of plant output in Kwh/ Calculated nominal plant output in Kwh.

Nominal plant output = Solar irradiation at the generating surface \* relative efficiency.

Kerala State Electricity Board industrial tariff shall be taken as base for calculating penalty.

If the plant continue to underperform for two consecutive years, IREL (India) Ltd reserve the right to terminate the contract and forfeit the operation and maintenance security & performance warranty submitted by the contractor.

## 20.0 ACCEPTANCE OR REJECTION OF BIDS:

- 20.1. IREL, RED reserves the right to accept or reject any bid or all the bids at any time prior to award of contract, without thereby incurring any liability or any obligation to inform the affected bidder or bidders of the grounds for the said action.
- 20.2. Any Bid with incomplete information is liable for rejection.
- 20.3. For each category of pre-qualification criteria, the documentary evidence is to be produced duly attested by the authorized representative of the bidder and serially numbered. If the documentary proof is not submitted for any/ all criteria the Bid is liable for rejection.
- 20.4. If any information given by the bidder is found to be false/fictitious, the Bidder will be debarred for 3 years from participating in any other tenders of IREL,RED and will be black listed.

#### 21.0 **OTHER TERMS**

- 21.1. The distance between the proposed site and the substation for interconnection of solar plant is approximately 300mtr.
- 21.2. The generation meter has to be installed at the electrical substation. (Existing generation meter can be used subjected to the approval by CEA/KSEBL/Statutory bodies.
- 21.3. The bidder has to comply all necessary regulations of CEA/KSEBL wherever required.
- 21.4. Necessary statutory procedures related to KSEBL HT consumer has to be followed and complied.
- 21.5. This NIT is a turnkey project, as such any specific item is not described in the NIT but required to be carried for the successful execution of the contract is deemed to the part of the quoted rate.

## 22.0 PAYMENT TERMS

- 22.1. 70% payment less the statutory deductions for the supply parts (PART-A of BOQ) shall be released after successful supply of materials and acceptance by the EIC within 30 days on the submission of clean and clear bill/Invoice.
- 22.2. 10% payment of the supply parts and 80% payment less the statutory deductions for the Installation & commissioning part (PART-B of BOQ) for the completed portion shall be released, after successful completion of installation & commissioning of the solar power plant as per the Bill of quantities /price schedule, after the due certification of clean and clear bill/Invoice by EIC within 30 days on the submission.
- 22.3. 15% payment of the supply parts and Installation and commissioning part shall be released after successful charging of the system and streamline the solar plant with grid connectivity.
- 22.4. Remaining 5% payment of the supply parts and Installation & commissioning part shall be released after completion of 5 year warranty period from the date of charging of solar plant along with security deposit. The same can be released against bank guarantee for the value and said period.
- 22.5. AMC (PART-C of BOQ) charges for each year shall be released on half yearly basis, on submission of service report and tax invoice after completion of each half year servicing from sixth year onwards.
- 22.6. The TDS at the source will be deducted as per the Govt. rule and regulations. IREL, RED will issue necessary certificates of TDS deduction.

## 23.0 <u>COMMENCEMENT AND COMPLETION PERIOD</u>

- 23.1 The work shall be carried out without effecting the normal functioning of the company. Qualified supervisor shall be present throughout the installation period of the solar power plant. Supervisor shall take necessary safety permit from the safety department and follows the safety norms of the company.
- Work shall be commenced with 7 days from the acceptance of the work order, or 15 days from the date of handing over the site whichever is later. The date of acceptance of the work order shall be

- defined as the date of signing the letter of acceptance of the work order or 7 days from the date of dispatching of the order whichever is earlier.
- 23.3 The entire as specified in the work order shall be completed within **300 days** from the date of commencement of work. In case any stoppage of work due to the reason by IREL,RED or CEA/KSEBL procedural delay after commencement of the work, the number of days stopped shall be extended for the completion of the work.

## 24.0 **ENGINEER-IN-CHARGE (EIC)**

Shri. K A Joshy, M- Technical (Electrical) will be the Engineer-in-Charge (EIC) for the work.

## **BILL OF QUANTITIES (BOQ)**

Supply part (PART - A)			
Sl. No.	Description	Qty	unit
01	Supply of 60Kwp Solar PV modules as specified in the	•	
	technical specification.	01	Lot
02	Supply of 60Kwp Solar string Inverter as specified in the	01	N.T.
	technical specification.	01	No.
Installat	ion & Commissioning part (PART - B)	•	
03	Supply and Installation of GI structural materials (Tata	01	Lot
	steel/Apollo) and SS fasteners.	01	Lot
04	Supply and installation of DCDB with type1+2 DC SPD,		
	DC Breaker, suitable capacity copper conductor cable,		
	DC string disconnector fuse etc., ACDB with type2 AC	01	Set
	SPD, MCCB, Isolators, RPR, MFM, Phase Indicators,	01	361
	suitable capacity copper conductor cable etc. (as per		
	CEA/KSEBL specifications).		
05	Supply, Testing/calibration & installation of HT or LT		
	Net meter (3 Phase Bidirectional TOD Meter, as per		
	Electrical Inspectorate requirement) and Solar Energy		
	meter (3 phase unidirectional TOD meter) as per KSEB	01	Set
	specifications) (all meters shall be tested/calibrated by	-	
	KSEBL or authorized testing centre of KSEBL). (If		
	existing metering system is using the amount will not be		
0.6	admissible to the party).		
06	Supply and installation of Earthing system and Lightning		
	Arrestors (LAs). (Separate earthing shall be provided for	01	Lumpsum
	DC system, AC system and LAs as per relavent IS		1
07	/CEA/KSEBL norms).		
07	Supply and Installation of interconnecting panels to Grid as per site conditions.	01	No.
08	1		
06	Supply and installation of data monitoring system, SCADA for data acquisition and transferring facility.	01	Lumpsum
09	Supply of HT CTs and HT PTs as per KSEB specifications		
07	(if required).	01	Set
10	Supply, laying, dressing, glanding and termination of		
10	150Sq. mm, 3.5core, Al conductor, armoured cable.		
	Laying shall be through the existing route. Wherever		
	cable tray is not there, cable shall be routed along the	300	Mtr.
	wall with proper clamping at appropriate distance. For		
	road crossing if required, necessary cable trench shall be		
	provided as per standard measurements.		
11	Miscellaneous work in connection with modification of		
	existing solar metering panel and its associated cabling	01	Lumpsum
	work.		
12	Charges for scheme drawing preparation, scheme		
	approval, Inspection, Testing & Energizing approval etc	01	Lumpsum
	from CEA/KSEBL		
AMC Cl	narges (PART - C)		
13	AMC Charges (6th year).	01	Lumpsum
14	AMC Charges (7th year).	01	Lumpsum

15	AMC Charges (8th year).	01	Lumpsum
16	AMC Charges (9th year).	01	Lumpsum
17	AMC Charges (10th year).	01	Lumpsum

## <u>Note</u>

The fee payable to CEA & KSEB towards charges for application for scheme approval, energizing approval to CEA, KSEB (if any) will be reimbursed by IREL against production of original receipts. Hence the same will not be form part of it.

## $\frac{\text{GENERAL CONDITIONS OF CONTRACT (GCOC)}}{\underline{\text{INDEX}}}$

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2	SELLER TO INFORM
3	CONFLICT AND INTERPRETATION OF DOCUMENTS
4	COUNTRY OF ORIGIN
5	SCOPE OF CONTRACT
6	STANDARDS
7	INSTRUCTIONS, DIRECTION & CORRESPONDENCE,
	CONTRACT OBLIGATIONS
8	MODIFICATION IN CONTRACT
9	PATENT RIGHTS, LIABILITY & COMPLIANCE OF
	REGULATIONS
10	INSPECTION, TESTING & EXPEDITING
11	TIME SCHEDULE & PROGRESS REPORTING
12	DELIVERY & DOCUMENTS
13	TRANSIT RISK INSURANCE
14	TRANSPORTATION
15	INCIDENTAL SERVICES
16	SPARE PARTS, MAINTENANCE TOOLS, LUBRICANTS
17	GUARANTEE
18	PRICES
19	SUBLETTING AND ASSIGNMENT
20	TIME AS ESSENCE OF CONTRACT
21	DELAYS IN THE SELLER'S PERFORMANCE
22	LIQUIDATED DAMAGES FOR DELAYED DELIVERY
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	REPLACEMENT
24	TERMINATION FOR DEFAULT
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26	RESOLUTION OF DISPUTES/ ARBITRATION
27	TAXES & DUTIES
28	PERMITS & CERTIFICATES
29	FALL CLAUSE
30	LIMITATION OF LIABILIT
31	METHOD OF BLACKLISTING VENDORS
32	SECRECY
33	GENERAL
34	RISK PURCHASE CLAUSE

#### General Conditions of Contract (GCOC)

Definitions In this document, General Conditions of Contract (GCC-Goods), the following terms shall have the following respective meanings:

- BIDDER: Designates the individual or legal entity which has made a proposal, a tender or a bid with the aim of concluding a Contract with the PURCHASER. 1.0
- 1.1
- 1.2 CONTRACT shall mean Purchase Order/ Service Contracts and all attached exhibits and documents referred to therein and all terms and conditions thereof together with any subsequent modifications thereto.
- 1.3
- CONTRACT PRICE shall mean the price payable to the Seller under the Contract for the full and proper performance of his contractual obligations.

  COMPLETION DATE shall mean the date on which the goods are successfully supplied/commissioned by the Seller and handed over to the PURCHASER. 1.4
- 1.5 COMMERCIAL OPERATION shall mean the condition of the operation in which the complete equipment covered under the Contract is officially declared by the PURCHASER to be available for continuous operation at different loads up to and including rated capacity.
- DELIVERY terms shall be interpreted as per INCO TERMS 2000 in case of Contract with a foreign Bidder and as the Goods-in-ward date in the case of a contract with an Indian Bidder. 16
- 1.7 DRAWINGS shall mean and include Engineering drawings, sketches showing plans, sections and elevations in relation to the Contract together with modifications and/or revisions thereto. 1.8
  - OFFICER-IN-CHARGE(OIC)/ENGINEER-IN-CHARGE(EIC): OFFICER-IN-CHARGE (OIC) / Engineer-in-Charge of the Project SITE shall mean the person designated from time to time by PURCHASER/CONSULTANT at SITE and shall include those who are expressly authorized by him/her to act for and on his/her behalf for operation of this CONTRACT. The Officer/ Engineer-in-charge shall have authority for
    - General supervision, Follow up of supply and direction of the work
    - direction to stop the work whenever such stoppage may be necessary to ensure the proper execution of the Contract
    - to reject all works and materials which do not conform to the contract The OIC/EIC shall have neither any authority to relieve the contractor of any of his duties / obligations under the contract nor ordering any work involving delay or any extra payment by IREL or making any variation of or in the work except otherwise expressly provided here-in-under or elsewhere
- 1.9 FINAL ACCEPTANCE shall mean the PURCHASER's written acceptance of the Works performed under the Contract after successful completion of performance and guarantee test.
- GOODS shall mean articles, materials, equipment, design and drawings, data and other property to be supplied by Seller to complete the contract.

  INSPECTOR shall mean any person or outside Agency nominated by PURCHASER/CONSULTANT through CONSULTANT to inspect equipment, stagewise as well as final, before 1.10
- 1.11 dispatch, at SELLER's works and on receipt at SITE as per terms of the CONTRACT.
- INITIAL OPERATION shall mean the first integral operation of the complete equipment covered under the Contract with sub-systems and supporting equipment in service or available 1.12 for service.
- PURCHASER shall mean IREL (India) Limited (IREL) having its registered office at Plot No. 1207, Veer Savarkar Marg, Near Siddhi Vinayak Temple, Prabhadevi, Mumbai -400028. The 1 13 term PURCHASER includes successors, assigns of IREL.
- PERFORMANCE AND GUARANTEE TESTS shall mean all operational checks and tests required to determine and demonstrate capacity, efficiency and operating characteristics as 1.14 specified in the Contract documents.
- PROJECT designates the aggregate of the Goods and/or Services to be provided by one or more Contractors. 1.15
- QUANTITIES Bills of quantities designate the quantity calculations to be taken into account when these calculations are made from detailed or construction drawings, or from work 1.16 actually performed, and presented according to a jointly agreed breakdown of the Goods and/or Services.
- SELLER shall mean the person, firm or company with whom PURCHASE ORDER/ SERVICE CONTRACT is placed/ entered into by PURCHASER for supply of equipment, materials 1.17 and services. The term Seller includes its successors and assigns.
- SERVICE shall mean erection, installation, testing, commissioning, provision of technical assistance, training and other such obligations of the Seller covered under the Contract.
- SITE designates the land and/or any other premises on, under, in or across which the Goods and/or Services have to be supplied, erected, assembled, adjusted, arranged and/or 1.19 commissioned.
- SPECIFICATIONS shall mean and include schedules, details, description, statement of technical data, performance characteristics, standards (Indian as well as International) as applicable 1.20 and specified in the Contract.
- 1.21 SUB-CONTRACT shall mean order placed by the Seller, for any portion of the contracted work, after necessary consent and approval of PURCHASER.
- SUB-CONTRACTOR shall mean the person named in the CONTRACT for any part of the work or any person to whom any part of the CONTRACT has been sub-let by the SELLER with 1.22 the consent in writing of the CONSULTANT/PURCHASER and will include the legal representatives, successors, and permitted assigns of such person.
- 1 23 START-UP shall mean the time period required to bring the equipments covered under the Contract from an inactive condition, when construction is essentially complete to the state of readiness for trial operation. The start-up period shall include preliminary inspection and check out of equipment and supporting subsystems, initial operation of the complete equipments covered under the Contract to obtain necessary pre-trial operation data, perform calibration and corrective action, shutdown inspection and adjustment prior to the trial operation period.
- TESTS shall mean such process or processes to be carried out by the Seller as are prescribed in the Contract or considered necessary by PURCHASER or his representative in order to 1.24 ascertain quality, workmanship, performance and efficiency of equipment or part thereof.
- 1 25 TESTS ON COMPLETION shall mean such tests as prescribed in the Contract to be performed by the Seller before the Works are taken over by the PURCHASER.

#### 2.0 SELLER TO INFORM:

The Seller shall be deemed to have carefully examined all contract documents to his entire satisfaction. Any lack of information shall not in any way relieve the Seller of his responsibility to fulfil his obligation under the Contract

#### CONFLICT AND INTERPRETATION OF DOCUMENTS: 3.0

- Words imparting the singular only also include the plural and vice versa where the context requires so; words imparting persons include firms or corporations and vice versa where the 3.1 context requires.
- 3.2 Word imparting masculine gender includes the feminine gender and vice versa where the context requires so.
- The several documents forming the contract are to be taken as mutually explanatory of one another. 3.3
- 3.4 In case conflicting statements or directives occur among the contract documents, it shall be the responsibility of the successful bidder to notify IREL, with a copy sent concurrently to the OIC/EIC, immediately in writing and obtain instructions from IREL to eliminate the conflict.
- 3.5 The successful bidder shall notify IREL, with a copy sent concurrently to the EIC/OIC, promptly of any discrepancies, omissions or doubts it may have, regarding drawings, specifications or other documents. Noted or calculated dimensions shall always be followed
- In the event of conflict between various documents forming the contract, the relevant terms and conditions of the purchase order shall prevail over those of all such other documents 3.6 forming the contract and binding on the contractor and IREL
- In case of any conflict between the General Conditions of contract and the Special Conditions of the contract, the Special Conditions of contract shall prevail. 3.7
- Country of Origin: For purposes of this Clause "Origin" means the place where the Goods were produced, or from which the services are supplied. Goods are produced when, through 4.0 manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

#### 5.0 5.1

- Scope of the CONTRACT shall be as defined in the PURCHASE ORDER/CONTRACT specifications, drawings and Annexure thereto.
- Completeness of the EQUIPMENT shall be the responsibility of the SELLER. Any equipment, fittings and accessories which may not be specifically mentioned in the specifications or drawings, but which are usual or necessary for the satisfactory functioning of the equipment (successful operation and functioning of the EQUIPMENT being SELLER's responsibility) 5.2 shall be provided by SELLER without any extra cost. 5.3
  - The SELLER shall follow the best modern practices in the manufacture of high grade EQUIPMENT notwithstanding any omission in the specifications. The true intent and meaning of these documents is that SELLER shall in all respects, design, engineer, manufacture and supply the equipment in a thorough workmanlike manner and supply the same in prescribed time to the entire satisfaction of PURCHASER.
- The SELLER shall furnish minimum three (03) copies in English language of Technical documents, final drawings, preservation instructions, operation and maintenance manuals, test 5.4 certificates, spare parts catalogues for all equipment to the PURCHASER.
- 5.5 The documents once submitted by the SELLER shall be firm and final and not subject to subsequent changes. The SELLER shall be responsible for any loss to the PURCHASER/CONSULTANT consequent to furnishing of incorrect data/drawings.
- 5.6 All dimensions and weight should be in metric system.
- 5.7 All equipment to be supplied and work to be carried out under the CONTRACT shall conform to and comply with the provisions of relevant regulations/Acts (State Government or Central Government) as may be applicable to the type of equipment/work carried out and necessary certificates shall be furnished.
- The Seller shall provide cross sectional drawings, wherever applicable, to identify the spare part numbers and their location. The size of bearings, their make and number shall be 5.8
- 5.9 Specifications, design and drawings issued to the SELLER along with NIT/RFQ and CONTRACT are not sold or given but loaned. These remain property of PURCHASER/CONSULTANT or its assigns and are subject to recall by PURCHASER/CONSULTANT. The SELLER and his employees shall not make use of the drawings,

specifications and technical information for any purpose at any time except for manufacture against the CONTRACT and shall not disclose the same to any person, firm or corporate body, without written permission of PURCHASER/CONSULTANT. All such details shall be kept confidential.

SELLER shall pack, protect, mark and arrange for despatch of EQUIPMENT as per instructions given in the CONTRACT. 5.10

#### STANDARDS

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The GOODS supplied under the CONTRACT shall conform to the standards mentioned in the Technical Specifications, or such other standards which ensure equal or higher quality, and when no applicable standard is mentioned, to the authoritative standard appropriate to the GOODS' country of origin and such standards shall be the latest issued by the concerned institution.

#### 7.0 Instructions, Direction & Correspondence 7.1

The materials described in the CONTRACT are to be supplied according to the standards, data sheets, tables, specifications and drawings attached thereto and/or enclosed with the CONTRACT, itself and according to all conditions, both general and specific enclosed with the contract, unless any or all of them have been modified or cancelled in writing as a whole or

- $a. \ All \ instructions \ and \ orders \ to \ SELLER \ shall, excepting \ what \ is \ herein \ provided, be \ given \ by \ PURCHASER/CONSULTANT.$
- b. All the work shall be carried out under the direction of and to the satisfaction of PURCHASER/CONSULTANT.
- c. All communications including technical/commercial clarifications and/or comments shall be addressed to CONSULTANT in quintuplicate with a copy to PURCHASER and shall always bear reference to the CONTRACT.
- d. Invoices for payment against CONTRACT shall be addressed to PURCHASER. The CONTRACT number shall be shown on all invoices, communications, packing lists, containers and bills of lading, etc.
- e. Invoice must contain seller's GST Registration number, PAN, Bank detail of supplier, GST Registration number of IREL Factory/ Office, HSN Code for products being supplied. Supplier must submit e-way bill, e-invoice from GSTM Portal.

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- 7.2.1 If after award of the contract, the Seller does not acknowledge the receipt of award or fails to furnish the performance guarantee within the prescribed time limit, the PURCHASER reserves the right to cancel the contract and apply all remedies available to him under the terms and conditions of this contract.
- 7.2.2 Once a contract is confirmed and signed, the terms and conditions contained therein shall take precedence over the Seller's bid and all previous correspondence.

#### 8.0

All modifications leading to changes in the CONTRACT with respect to technical and/or commercial aspects including terms of delivery, shall be considered valid only when accepted in writing by PURCHASER/CONSULTANT by issuing amendment to the CONTRACT. Issuance of acceptance or otherwise in such cases shall not be any ground for extension of agreed delivery date and also shall not affect the performance of contract in any manner except to the extent mutually agreed through a modification of contract.

PURCHASER/CONSULTANT shall not be bound by any printed conditions or provisions in the SELLER's Bid Forms or acknowledgment of CONTRACT, invoices, packing list and

8.2 other documents which purport to impose any conditions at variance with or be supplemental to CONTRACT.

#### Patent Rights, Liability & Compliance of Regulations:

SELLER hereby warrants that the use or sale of the materials delivered hereunder will not infringe claims of any patent covering such material and SELLER agrees to be responsible for and to defend at his sole expense all suits and proceedings against PURCHASER based on any such alleged patent infringement and to pay all costs, expenses and damages which PURCHASER and/or CONSULTANT may have to pay or incur by reason of any such suit or proceedings.

The SELLER shall indemnify the PURCHASER against all third party claims of infringement of patent, trade mark or industrial design rights arising from use of the GOODS or any part thereof in the PURCHASER's country.

SELLER shall also protect and fully indemnify the PURCHASER from any claims from SELLER'S workmen/employees or their heirs, dependants, representatives, etc. or from any other person/persons or bodies/companies etc. for any acts of commissions or omission while executing the CONTRACT.

SELLER shall be responsible for compliance with all requirements under the laws and shall protect and indemnify completely the PURCHASER from any claims/penalties arising out of any infringements.

PURCHASER will promptly notify the SELLER in writing of any such claim, suit, action or proceeding coming to its attention, giving authority and all available information and assistance for the SELLER's defence of the same. If at any time the installation of the plant or any part thereof, or the use thereof in India for the purpose for which it is furnished or the sale of products produced therewith, is prevented or enjoyed because of patent infringement or claimed infringement, the SELLER shall promptly at his own expense, either procure for PURCHASER the rights to use and continue to use such plant or replace the same at his own expense with equally efficient non-infringing plant satisfactory under all requirements of the contract, so that the operation of PURCHASER's plant will not be unduly delayed or interrupted. If shipment of the plant, or any part thereof is prevented by attachment, injunction or otherwise, or in the course of transit from the SELLER's factory or other point of origin to the site of PURCHASER, as a result of any claim of patent infringement the SELLER's shall, at his own cost and expense, promptly furnish and post the necessary bond or take such other steps as may be necessary to enable shipment to be made without delay. PURCHASER will have the right to retain counsel of its own choice to collaborate in the defence of any such claim, suit action or proceeding.

#### 10.0 Inspection, Testing & Expediting

The PURCHASER or its representative shall have the right to inspect and/or to test the GOODS to confirm their conformity to the CONTRACT specifications. The special conditions of CONTRACT and/or the Technical Specifications shall specify what inspections and tests the PURCHASER requires and where they are to be conducted. The PURCHASER shall notify the SELLER in writing the identity of any representative(s) retained for these purposes.

The inspections and tests may be conducted on the premises of the SELLER or his sub-contractor(s), at point of DELIVERY and/or at the GOODS' final destination, When conducted on the premises of the SELLER or his sub-contractor (s), all reasonable facilities and assistance including access to the drawings and production data shall be furnished to the inspectors at no charge to the PURCHASER.

Should any inspected or tested GOODS fail to conform to the specifications, the PURCHASER may reject them and the SELLER shall either replace the rejected GOODS or make all alterations necessary to meet Specifications' requirements, free of cost to the PURCHASER.

The PURCHASER's right to inspect, test and where necessary reject the GOODS after the GOODS arrival in the PURCHASER's country shall in no way be limited or waived by reason of the GOODS having previously been inspected, tested and passed by the PURCHASER, or their representative prior to the GOODS shipment from the country of origin.

The INSPECTOR shall follow the progress of the manufacture of the GOODS under the CONTRACT to ensure that the requirements outlined in the CONTRACT are not

being deviated with respect to schedule and quality.

SELLER shall allow the INSPECTOR to visit, during working hours, the workshops relevant for execution of the CONTRACT during the entire period of CONTRACT validity.

In order to enable PURCHASER's representatives to carryout the inspection in time, SELLER shall notify PURCHASER 15 days before assembly, testing and packing of main EQUIPMENT. If requested, SELLER shall assist PURCHASER's representatives in getting visas in the shortest possible time (applicable only in case of foreign order).

SELLER shall place at the disposal of the INSPECTOR, free of charge, all tools, instruments, and other apparatus necessary for the inspection and/or testing of the GOODS. The INSPECTOR is entitled to prohibit the use and dispatch of GOODS and/or materials which have failed to comply with the characteristics required for the GOODS during tests and inspections.

SELLER shall advise in writing of any delay in the inspection program at the earliest, describing in detail the reasons for delay and the proposed corrective action.

ALL TESTS and trials in general, including those to be carried out for materials not manufactured by SELLER shall be witnessed by the INSPECTOR. Therefore, SELLER shall confirm to PURCHASER by fax or e-mail about the exact date of inspection with at least 30 days notice. SELLER shall specify the GOODS and quantities ready for testing and indicate whether a preliminary or final test is to be carried out.

If on receipt of this notice, should PURCHASER waive the right to witness the test, timely information will be given accordingly.

10.12 Any and all expenses incurred in connection with tests, preparation of reports and analysis made by qualified laboratories, necessary technical documents, testing documents and drawings shall be at SELLER's cost. The technical documents shall include the reference and numbers of the standards used in the construction and, wherever deemed practical by the INSPECTOR, copy of such standards.

Nothing in Article-10 shall in any way release the SELLER from any warranty or other obligations under this CONTRACT. 10.13

Arrangements for all inspections required by Indian Statutory Authorities and as specified in technical specifications shall be made by SELLER. 10.14

#### Inspection & Rejection of Materials by consignees:

When materials are rejected by the consignee, the supplier shall be intimated with the details of such rejected materials, as well as the reasons for their rejection, also giving location where such materials are lying at the risk and cost of the supplier. The supplier will be called upon either to remove the materials or to give instructions as to their disposal within 14 days and in the case of dangerous, infected and perishable materials within 48 hours, failing which the consignee will either return the materials to the SELLER freight to pay or otherwise dispose them off at the SELLER's risk and cost. The PURCHASER shall also be entitled to recover handling and storage charges for the period, during which the rejected materials are not removed @ 5% of the value of materials for each month or part of a month till the rejected materials are finally disposed off.

#### Time Schedule & Progress Reporting

Together with the Contract confirmation, SELLER shall submit to PURCHASER, his time schedule regarding the documentation, manufacture, testing, supply, erection and commissioning of the GOODS.

- 11.2 PURCHASER's/CONSULTANT's representatives shall have the right to inspect SELLER's premises with a view to evaluating the actual progress of work on the basis of SELLER's time
- 11.3
- Irrespective of such inspection, SELLER shall advise PURCHASER at the earliest possible date of any anticipated delay in the progress.

  Notwithstanding the above, in case progress on the execution of contract at various stages is not as per phased time schedule and is not satisfactory in the opinion of the PURCHASER/CONSULTANT which shall be conclusive or SELLER shall neglect to execute the CONTRACT with due diligence and expedition or shall contravene the provisions of the CONTRACT, PURCHASER/CONSULTANT may give notice of the same in writing to the SELLER calling upon him to make good the failure, neglect or contravention complained of. Should SELLER fail to comply with such notice within the period considered reasonable by PURCHASER/CONSULTANT, the PURCHASER/ CONSULTANT shall have the option and be at liberty to take the CONTRACT wholly or in part out of the SELLER's hand and make alternative arrangements to obtain the requirements and completion of CONTRACT at the SELLER's risk and cost and recover from the SELLER, all extra cost incurred by the PURCHASER on this account. In such event, PURCHASER / CONSULTANT shall not be responsible for any loss that the SELLER may incur, and SELLER shall not be entitled to any gain. PURCHASER/CONSULTANT shall, in addition, have the right to encash Performance Guarantee in full or part.

#### 12.0 Delivery & Documents:

12.2

13.2

- Delivery of the GOODS shall be made by the SELLER in accordance with terms specified in the CONTRACT, and the goods shall remain at the risk of the SELLER until delivery has been 12.1 completed.
  - Delivery shall be deemed to have been made:
    - a) In the case of FOB, CFR & CIF Contracts, when the Goods have been put on board the ship, at the specified port of loading and a clean Bill of Lading is obtained. The date of Bill of Lading shall be considered as the delivery date.
    - b) In case of FOT despatch point contract (For Indian bidder), on evidence that the goods have been loaded on the carrier and a negotiable copy of the GOODS receipt obtained, the date of LR/GR shall be considered as the date of delivery. c) In case of FOT site/ FOR Destination (for Indian bidders), on receipt of goods by PURCHASER/Consultant at the designated site(s).
- 12.3 The delivery terms are binding and essential and consequently, no delay is allowed without the written approval of PURCHASER/CONSULTANT. Any request concerning delay will be void unless accepted by PURCHASER/CONSULTANT through a modification to the CONTRACT.
- Delivery time shall include time for submission of drawings for approval, incorporation of comments, if any, and final approval of drawings by PURCHASER/CONSULTANT In the event of delay in delivery, Liquidated Damages as stipulated in Article 22.1 shall apply. 12.4
- 12.5
- 12.6 The documentation, in English Language, shall be delivered in due time, in proper form and in the required number of copies as specified in the contract.
- 12.7 The additional copies of final drawings and instructions will be included in the package of goods, properly enveloped and protected.
- The SELLER should comply with the Packing, Marking and Shipping Documentation Specifications enclosed. 12.8

#### 13.0 Transit Risk Insurance

- All goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and 13.1 delivery.
  - Where delivery is on FOB or CFR basis, marine insurance shall be the responsibility of the Purchaser. Insurance Requirements > Indigenous Bidders: Transit risk insurance from F.O.T. despatch point onwards shall be arranged and borne by PURCHASER. In case of F.O.T site contracts, transit insurance to be borne by SELLER. > Foreign Bidders: Marine insurance as well as transit insurance in Purchaser's country shall be arranged and borne by PURCHASER. The SELLER shall ensure that in effecting despatch of materials, the primary responsibility of the carriers for safe movement is always retained so that the PURCHASER's interests are fully safeguarded and are in no way jeopardised. The Seller shall furnish the cost of materials against each equipment.

#### 14.0 Transportation

- Where the SELLER is required under the CONTRACT to deliver the GOODS FOB, transport of the GOODS until delivery, that is, upto and including the point of putting the GOODS on 14.1 board the export conveyance at the specified port of loading, shall be arranged and paid for by the SELLER and the cost thereof shall be included in the Contract price.
- Where the SELLER is required under the CONTRACT to deliver the GOODS CFR or CIF, transport of the Goods to the port of discharge or such other point in the country of destination 14.2 as shall be specified in the CONTRACT shall be arranged and paid for by the SELLER and the cost thereof shall be included in the Contract price.

#### 15.0 Incidental Services:

- 15.1 The Seller may be required to provide any or all of the following services:
- 15.1.1 Performance or supervision of onsite assembly and/or start-up of the supplied Goods:
- Furnishing tools required for assembly and/or maintenance of the supplied Goods: 15.1.2
- 15.1.3 Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Seller of any warranty/ guarantee obligations under the Contract.
- Training of the Purchaser's personnel at the Seller's plant and/or at Site, in assembly, start-up operation, maintenance and/or repair of the supplied Goods at no extra cost. However, 15.1.4 Purchaser will bear boarding, lodging & personal expenses of Trainees.
- Prices charged by the Seller for the preceding incidental services, shall not exceed the prevailing rates charged to other parties by the Seller for similar services. 15.2
- 15.3 When required, Seller shall depute necessary personnel for supervision and/or erection of the Equipment at site for duration to be specified by Purchaser on mutually agreed terms.
- Seller's personnel shall be available at Site within seven days for emergency action and twenty one days for medium and long-term assistance, from the date of notice given by Purchaser. 15.4 The cost of incidental services shall not be included in the quoted prices. The cost of applicable incidental services should be shown separately in the price schedules whenever asked for in the tender.

#### 16.0 Spare Parts, Maintenance Tools, Lubricants

- Seller may be required to provide any or all of the following materials and notification pertaining to spare parts manufactured or distributed by the Seller. 161
- 16.1.1 Such spare parts as the Purchaser may opt to purchase from the Seller, provided that his option shall not relieve the Seller of any warranty obligations under the Contract, and 16.1.2 In the event of termination of production of the spare parts:
  - i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements, and
  - ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if any when, requested.
- Seller shall supply item wise list with value of each item of spare parts and maintenance tools requirements, along with full details of manufacturers/vendors for such 16.2 spares/maintenance tools for:
- 16.2.1 The construction, execution and commissioning.
- 16.2.2 Two years operation and maintenance.
- 16.3 Spare parts shall be new and of first-class quality as per engineering standards/ codes, free of any defects (even concealed), deficiency in design, materials and workmanship and also shall be completely interchangeable with the corresponding parts.
- Type and sizes of bearings shall be clearly indicated. 16.5
  - Spare parts shall be packed for long storage under tropical climatic conditions in suitable cases, clearly marked as to intended purpose
- A list of special tools and gauges required for normal maintenance and special handling and lifting appliances, if any, for the Goods shall be submitted to Purchaser. 16.6
- 16.7 Bidders should note that if they do not comply with Clause 16.2 above, their quotation may be rejected.
- 16.8 Lubricants
- Whenever lubricants are required, Seller shall indicate the quantity of lubricants required for the first filling, the frequency of changing, the quantity of lubricants required for the one 16.8.1 year's continuous operation and the types of recommended lubricants indicating the commercial name (trade-mark), quality and grade.
- 1682 If Seller is unable to recommend specific oil, basic recommended characteristics of the lubricants shall be given.
- 16.8.3 Seller shall indicate various equivalent lubricants available in India.

#### Guarantee 17.1

All Goods or Materials shall be supplied strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated in the Contract. No deviation from such specifications or alterations or of these conditions shall be made without PURCHASER'S / CONSULTANT'S agreement in writing which must be obtained before any work against the order is commenced. All materials supplied by the SELLER pursuant to the Contract (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by PURCHASER) are guaranteed to be of the best quality of their respective kinds (unless otherwise specifically authorised in writing by PURCHASER) and shall be free from faulty design, workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfil in all respects all operating conditions, if any, specified in the Contract.

If any trouble or defect, originating with the design, material, workmanship or operating characteristics of any materials, arises at any time prior to twelve(12) months from the date of the first commercial operation of the Plant for which the materials supplied under the Contract form a part thereof, or Fifteen (15) months from the date of last shipment whichever period shall first expire, and the SELLER is notified thereof, SELLER shall, at his own expense and as promptly as possible, make such alterations, repairs and replacements as may be necessary to permit the materials to function in accordance with the specifications and to fulfil the foregoing guarantees. PURCHASER may, at his option, remove such defective materials, at SELLER'S expense in which event SELLER shall, without cost to PURCHASER and as promptly as possible, furnish and install proper materials. Repaired or replaced materials shall be similarly guaranteed by the SELLER for a period of no less than twelve (12) months from the date of replacement/repair.

In the event that the materials supplied do not meet the specifications and/or not in accordance with the drawings, data sheets or the terms of the Contract and rectification is required at site, PURCHASER shall notify the SELLER giving full details of differences. The SELLER shall attend the site within seven (7) days of receipt of such notice to meet and agree with representatives of PURCHASER, for taking the action required to correct the deficiency. Should the SELLER fail to attend meeting at Site within the time specified above, PURCHASER shall immediately rectify the work/ materials and SELLER shall reimburse PURCHASER all costs and expenses incurred in connection with such trouble or defect.

#### 17.2 PERFORMANCE GUARANTEE OF EQUIPMENT

- 17.2.1 SELLER shall guarantee that the performance of the EQUIPMENT supplied under the CONTRACT shall be strictly in conformity with the specifications and shall perform the functions specified under the CONTRACT
- If the SELLER fails to prove the guaranteed performance of the EQUIPMENT set forth in the specification, the SELLER shall investigate the causes and carry out necessary rectifications/modifications to achieve the guaranteed performance. In case the SELLER fails to do so within a reasonable period, the SELLER shall replace the EQUIPMENT and prove 1722 guaranteed performance of the new equipment without any extra cost to PURCHASER.
- If the SELLER fails to prove the guarantee within a reasonable period, PURCHASER/CONSULTANT shall have the option to take over the EQUIPMENT and rectify, if possible, the 17.2.3 EQUIPMENT to fulfil the guarantees and/or to make necessary additions to make up the deficiency at Seller's risk and cost. All expenditure incurred by the PURCHASER/ CONSULTANT in this regard shall be to SELLER's account.

#### 18.0 Prices:

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22.1

Prices charged by the SELLER for Goods delivered and services performed under the CONTRACT shall not, with the exception of any price adjustments authorized by the Contract vary from the prices quoted by the SELLER in his bid.

The price indicated in the Purchase Order is firm and not subject to alteration on any account unless specified otherwise in the terms The price indicated in the Purchase Order is firm and not subject to alteration on any account unless specified otherwise in the terms and conditions of Purchase Order. However, in case of delayed delivery, price reduction clause shall apply.

#### Subletting and Assignment:

The SELLER shall not without previous consent in writing of the PURCHASER, sublet, transfer or assign the contract or any part thereof or interest therein or benefit or advantage thereof in any manner whatsoever. Provided, nevertheless, that any such consent shall not relieve the SELLER from any obligation, duty or responsibility under the contract.

#### Time as Essence of Contract:

The time and date of delivery/completion of the GOODS/SERVICES as stipulated in the Contract shall be deemed to be the essence of the Contract.

#### 21.0 Delays in The Seller's Performance:

If the specified delivery schedule is not adhered to or the progress of manufacture or supply of the items is not satisfactory or is not in accordance with the progress schedule, the PURCHASER has the right to:

> hire for period of delay from elsewhere goods which in PURCHASER's opinion will meet the same purpose as the goods which are delayed and SELLER shall be liable without limitation for the hire charges;

- ii) ii) cancel the CONTRACT in whole or in part without liability for cancellation charges. In that event, PURCHASER may procure from elsewhere goods which PURCHASER's opinion would meet the same purpose as the goods for which CONTRACT is cancelled and SELLER shall be liable without limitations for the difference between the cost of such substitution and the price set forth in the CONTRACT for the goods involved; or iii) hire the substitute goods vide (I) above and if the ordered goods continue to remain undelivered thereafter, cancel the order in part or in full vide (ii) above.
- 21.1 Any un-excusable delay by the SELLER or his subcontractor shall render the SELLER liable, without prejudice to any other terms of the Contract, to any or all of the following sanctions: forfeiture of Contract performance guarantee, imposition of Liquidated Damages for delay in delivery, termination of the contract for default and purchase from another source at the risk and cost of the SELLER.
  - Liquidated Damages Schedule for Delayed Delivery Subject to Article -25, if the SELLER fails to deliver any or all of the GOODS or performance the services within the time period (s) specified in the CONTRACT, the PURCHASER shall, without prejudice to his other remedies under the CONTRACT, deduct from the CONTRACT PRICE, a sum calculated on the basis of the CONTRACT PRICE, including subsequent modifications.

#### 22.1.1 Deductions shall apply as per following formula:

A sum equivalent to 0.5 (Half) per cent of the prices of any portion of stores delivered late, for each week or part thereof of delay. The total damages shall not exceed 10 (Ten) percent of the value of delayed goods. The LD cannot exceed the amount stipulated in the contract.

- In case of delay in delivery on the part of SELLER, the invoice/document value shall be reduced proportionately for the delay and payment shall be released accordingly. 22.2
- In the event the invoice value is not reduced proportionately for the delay, the PURCHASER may deduct the amount so payable by SELLER, from any amount falling due to the SELLER or by recovery against the Performance Guarantee. Both seller and PURCHASER agree that the above percentages of price reduction are genuine pre estimates of the loss/damage which the PURCHASER would have suffered on account of delay/breach on the part of the SELLER and the said amount will be payable on demand without there being any proof of the actual loss/or damage caused by such breach/delay. A decision of the PURCHASER in the matter of applicability of price reduction shall be final and binding.

#### 23.0

- Rejections, Removal of Rejected Equipment & Replacement
  Preliminary inspection at SELLER's works by INSPECTOR shall not prejudice PURCHASER's/ CONSULTANT's claim for rejection of the EQUIPMENT on final inspection at SITE or
- 23.2 If the EQUIPMENTS are not of specification or fail to perform specified functions or are otherwise not satisfactory the PURCHASER/CONSULTANT shall be entitled to reject the EQUIPMENT/MATERIAL or part thereof and ask free replacement within reasonable time failing which obtain his requirements from elsewhere at SELLER's cost and risk. Nothing in this clause shall be deemed to deprive the PURCHASER AND/OR AFFECT ANY rights under the Contract which it may otherwise have in respect of such defects or
- 23.3 deficiencies or in any way relieve the SELLER of his obligations under the Contract. EQUIPMENT rejected by the PURCHASER/ CONSULTANT shall be removed by the Seller at his cost within 14 days of notice after repaying the amounts received against the SUPPLY. 23.4
- The PURCHASER shall in no way be responsible for any deterioration or damage to the EQUIPMENT under any circumstances whatsoever. 23.5 In case of rejection of EQUIPMENT, PURCHASER shall have the right to recover the amounts, if any, from any of CONTRACTOR'S invoices pending with PURCHASER or by alternative
- method(s). 24.1 Termination for Default
- In the event that the SELLER commits a breach of the provisions of this CONTRACT and/or fails to perform any of its obligations under this CONTRACT including but not limited to 24.1.1 failing to deliver any or all of the GOODS within the time period (s) specified in the CONTRACT, the SELLER shall be said to have committed a default of the provisions of this CONTRACT. In the event that such default is not cured by the SELLER within 30 days of a notice issued by the PURCHASER of such default, the PURCHASER shall be entitled to terminate this CONTRACT forthwith. The PURCHASER may, at its sole discretion, extend the time for curing the default by the SELLER beyond 30 days. The PURCHASER may, without prejudice to any other remedy for breach of CONTRACT, by written notice of default sent to the SELLER, terminate the CONTRACT in whole or in part:
  - A) If the SELLER fails to deliver any or all of the GOODS within the time period(s) specified in the CONTRACT; or
  - B) If the SELLER fails to perform any other obligation(s) under the CONTRACT, and
  - C) If the SELLER, in either of the above circumstances, does not cure his failure within a period of 30 days (or such longer period as the PURCHASER may authorize in writing) after receipt of the default notice from the PURCHASER
- In the event the PURCHASER terminates the CONTRACT in whole or in part, pursuant to Article 24.1.1the PURCHASER may procure, upon such terms and in such manner as it deems 24.1.2, appropriate, goods similar to those undelivered and the SELLER shall be liable to the PURCHASER for any excess costs for such similar GOODS. However, the SELLER shall continue performance of the CONTRACT to the extent not terminated.
- in case of termination of CONTRACT herein set forth (under clause 24) except under conditions of Force Majeure and termination after expiry of contract, the VENDOR shall be 24.1.3 blacklisted/ Debarred as per prevailing guidelines.

#### 24.2 Termination for Insolvency

The PURCHASER, may at any time, terminate the CONTRACT by giving written notice to the SELLER, without compensation to the SELLER, if the SELLER becomes bankrupt or 24.2.1 otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the PURCHASER.

#### 25.0 Force Majeure

25.1 Force majeure is an event beyond the control of SELLER and not involving the SELLER's fault or negligence and which is not foreseeable, which prevents the SELLER from fulfilling its obligations under the CONTRACT. Force Majeure shall mean and be limited to the following:

a) War/hostilities

- b) Riot or Civil commotion
- c) Earthquake, flood, tempest, lightening or other natural physical disaster.
- $d) \ Restrictions \ imposed \ by \ the \ Government \ or \ other \ Statutory \ bodies \ which \ prevent \ or \ delay \ the \ execution \ of \ the \ Contract \ by \ the \ SELLER.$

The decision as to whether an event constitutes force majeure shall rest with PURCHASER which shall be final and binding.

- 25.2 If there is delay in performance or other failures by the SELLER to perform obligations under the contract due to event of a Force Majeure, the SELLER shall not be held responsible for such delays/failures.
- If a Force Majeure situation arises, the SELLER shall promptly notify the purchaser in writing of such conditions and the cause thereof within fifteen days of occurrence of such event.

  Unless otherwise directed by the Purchaser in writing, the SELLER shall continue to perform its obligations under the contract as far as reasonable/practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
  - If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period of exceeding 120 days, PURCHASER may at its option terminate the contract without any financial repercussion on either side.

#### 26.0 Resolution of Disputes/ Arbitration

- 26.1 The PURCHASER and the SELLER shall make every effort to resolve amicably by direct informal, good faith negotiations any disagreement or dispute arising between them under or in connection with the contract.
- 26.2 If, after thirty days from the commencement of such informal negotiations, the PURCHASER and the SELLER have been unable to resolve the disagreement or dispute, the same be referred for resolution to the formal mechanism as specified hereunder.
- 26.3 Legal Construction: The Contract shall in all respects be construed and operated as an Indian Contract and in accordance with Indian Laws as in force for the time being.

#### 26.4 Arbitration:

25.4

a) All disputes and differences of any kind whatsoever arising out of or in connection with the contract or carrying out of the works (whether during the course of works or after their completion and whether before or after termination, abandonment or breach of contract) shall be referred to and settled by the person authorized and notified in writing by PURCHASER who shall state his decision in writing. Such a decision may be in the form of a final certificate or otherwise and shall be made within a period of 30 days from the date of receipt of such reference to them.

b) If the SELLER is dissatisfied with the decision of such authorized person, then he may within 30 days of receipt of such decision send a written appeal to PURCHASER, represented by the Chairman and Managing Director at the registered office, Mumbai for the same to be referred to Arbitration by a Sole Arbitrator to be appointed by mutual consent and after due approval of CMD, IREL. The Arbitration proceedings shall be conducted as per the provisions of the Arbitration and Conciliation Act, 1996. It is made clear that this Arbitration Clause shall be applicable to any and all disputes and differences between the Parties arising out of and/or relating to this CONTRACT and the Parties shall be bound to refer the same to arbitration in accordance with the procedure contemplated herein

- c) If the period of 30 days under Clause (b) has expired at any stage, stipulated in the preceding paras without any response from the SELLER before such expiry, the SELLER is deemed to have communicated his satisfaction to the decision of PURCHASER at the relevant stage and all his rights of further appeal or as the case may be and adjudication are deemed to have been waived once and for all.
- d) The seat of arbitration will be at Mumbaiand language thereof shall be English.
- e) Notwithstanding the invocation, commencement and/or pendency any dispute resolution proceedings under this Clause 26.0 including arbitration under Clause 26.4, the SELLER shall continue to be bound by the provisions of the CONTRACT, if not terminated by the EMPLOYER, and shall be obligated to discharge its obligations under the CONTRACT including continuation of the WORK under the CONTRACT.
- f) The Bidder shall not in any way delay or default or cause to delay or default the carrying out of the works by reason of the fact that any matter has been agreed to be referred for dispute resolution under Clause 26.0 including Arbitration under Clause 26.4.
- 26.5 Jurisdiction The courts at Kochi only shall, subject to Arbitration Clause, have exclusive jurisdiction to deal with and decide any matter arising out of this contract.

## 27. <u>Taxes & Duties</u> 27.1 A foreign Seller

- A foreign Seller shall be entirely responsible for all taxes, stamp duties, licence fees, and other such levies imposed outside the PURCHASER's country.
- A domestic Seller shall be entirely responsible for all taxes, duties, licence fees etc. incurred until the delivery of the contracted goods to the PURCHASER. However, GST on finished products shall be reimbursed by PURCHASER. Seller need to prepare E-Invoice under GST and submit monthly/ quarterly GST Return as per GST Rules. Failure to submit GST Return on time as per GST Rules may result into deduction of GST while processing suppliers' Bill.
- 27.3 Customs duty payable in India for imported goods ordered by PURCHASER on foreign Seller shall be borne and paid by PURCHASER.
- Any income tax payable in respect of supervisory services rendered by foreign Seller under the Contract shall be as per the Indian Income Tax Act and shall be borne by SELLER. It is upto the bidder/seller to ascertain the amount of these taxes and to include them in his bid price.

## 28. Permits & Certificates 28.1 SELLER shall procure.

SELLER shall procure, at his expense, all necessary permits, certificates and licences required by virtue of all applicable laws, regulations, ordinances and other rules in effect at the place where any of the work is to be performed, and SELLER further agrees to hold PURCHASER and/or CONSULTANT harmless from liability or penalty which might be imposed by reason of any asserted or established violation of such laws, regulations, ordinances or other rules. PURCHASER will provide necessary permits for SELLER's personnel to undertake any work in India in connection with Contract.

#### 29. <u>Fall Clause</u>

29.3

- 29.1 The price charged for the materials supplied under the order by the supplier shall in no event exceed the lowest price at which the supplier or his agent/principal/dealer, as the case may be, sells the materials of identical description to any Persons/Organizations including the Purchaser or any Department of the Central Govt. or any Department of a State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be, during the currency of the order.
- 29.2 If at any time during the said period, the supplier or his agent/principal/dealer, as the case may be, reduces the sale price, sells or offers to sell such materials to any persons/organizations including the Purchaser or any Deptt. Of Central Govt. or State Govt. as the case may be, at a price lower than the price chargeable under the order, he shall forthwith notify such reduction or sale or offer of sale to the Purchase Authority who has issued this order and the price payable under the order for the materials supplied after the date of coming into force of such reduction or sale or offer of sale shall stand correspondingly reduced. The above stipulation will, however, not apply to:
  - a) Exports by the Contractor/Supplier or
  - b) Sale of goods as original equipment at prices lower than the prices charged for normal replacement
  - c) Sale of goods such as drugs which have expiry dates.
  - The supplier shall furnish the following certificate to the concerned Paying Authority along with each bill for payment for supplies made against this order:- "I/We certify that there has been no reduction in sale price of the items/goods/materials of description identical to those supplied to the PURCHASER under the order herein and such items/goods/materials have not been offered/sold by me/us to any person/organizations including the Purchaser or any Deptt. of Central Govt. or any Deptt. of State Govt. or any Statutory Undertaking of the Central or State Govt. as the case may be upto the date of bill/during the currency of the order whichever is later, at a price lower than the price charged to the PURCHASER under the order". Such a certificate shall be obtained, except for quantity of items/goods/materials categories under sub-clause (a), (b) & (c) of sub-para 29.2 above, of which details shall be furnished by the supplier.

#### 30.0 Limitation of Liability

Notwithstanding anything contrary contained herein, the aggregate total liability of Seller under the Agreement or otherwise shall be limited to 100% of Agreement / Order price. However, neither party shall be liable to the other party for any indirect and consequential damages, loss of profits or loss of production.

#### 31.0 Method of blacklisting vendors

31.1 Any failure by the vendor (SELLER) to supply/execute the contract as per order may result in blacklisting of vendors by the PURCHASER through it competent authority. The blacklisted vendor shall not be considered for a minimum period of one year from the date of blacklisting.

- 31.2 Further the competent authority may blacklist the bidder, if the bidder changes bid (either techno-commercial and / or price) or withdraw his bid after receipt of the same and during the validity period of bid.
- Further, the vendor (SELLER) shall be banned from doing any business with the PURCHASER, indefinitely or for such period as may be determined by the PURCHASER at it sole 31.3 discretion, in case of
  - a. If security considerations including question of loyalty to the state so warrant.
  - b. If the proprietor, partner, Director's representative of the SELLER is convicted by a court of law following prosecution for any offences including offences relating to business or commercial dealings.
  - c. If there is strong justification, as determined by the PURCHASER at its sole discretion, for believing that the proprietor or employee or representative of the SELLER has been guilty of malpractice such as bribery, corruption, fraud, substitution of tenders, interpolation, misrepresentation, evasion or habitual default in payment of any tax levied by law, etc.
- 31.4 An order for ban/ suspension passed for a certain specified period shall be deemed to have been automatically revoked on expiry of that specified period and it will not be necessary to issue a specific formal order of revocation, except that an order of suspension/ban passed on account of doubtful loyalty or security consideration shall continue to remain in force until it is specifically revoked in writing.
- 31.5 An order of ban on grounds of conviction by Court of Law may be revoked if, in respect of the same facts, the SELLER has been wholly acquitted by a court of law.

#### 32.0 Secrecy

The SELLER shall not at any time during the pendency of the contract or thereafter disclose any information furnished to them by PURCHASER or any drawings, designs, reports and other documents and information prepared by the Contractor for this contract, without the prior written approval of PURCHASER except in so far as such disclosure is necessary for the performance of the Contractor's work and service hereunder.

#### General

34.0

- 33.1 In the event that terms and conditions stipulated in the General Conditions of Contract should deviate from terms and conditions stipulated in the Contract, the latter shall prevail. Any specific Terms / Conditions mentioned in PO will supersede this GCC.
- Losses due to non-compliance of Instructions: Losses or damages occurring to the PURCHASER owing to the SELLER's failure to adhere to any of the instructions given by the PURCHASER/CONSULTANT in connection with the contract execution shall be recoverable from the SELLER. 33.2
- Recovery of sums due: All costs, damages or expenses which the PURCHASER/CONSULTANT may have paid, for which under the contract, SELLER is liable, may be recovered by the 33.3 PURCHASER (he is hereby irrevocably authorized to do so) from any money due to or becoming due to the SELLER under this Contract or other Contracts and/or may be recovered by action at law or otherwise. If the same due to the SELLER be not sufficient to recover the recoverable amount, the SELLER shall pay to the PURCHASER, on demand, the balance amount. Payments, etc. not to affect rights of the PURCHASER: No sum paid on account by the PURCHASER nor any extension of the date for completion granted by the PURCHASER shall affect or prejudice the rights of the PURCHASER against the SELLER or relieve the SELLER of his obligation for the due fulfillment of the CONTRACT. 33.4
- Cut-off Dates: No claims or correspondence on this Contract shall be entertained by the PURCHASER/Consultant after 90 days after expiry of the performance guarantee (from the date 33.5 of final extension, if any).
- 33.6 Paragraph heading: The paragraph heading in these conditions shall not affect the construction thereof

#### RISK PURCHASE CLAUSE

After award of the contract, if the tenderer fails to execute the work as per tender or at any time repudiates the order, IREL (India) Limited has the right to forfeit and invoke the security deposit and execute the order from other agencies at the risk and cost of the tenderer. The cost difference between the alternative arrangements and total contract value will be recovered from the tenderer along with other incidental charges. In case of execution of order through alternative sources and if price is lower, no benefit on this account will be passed on to the

## "ETHICS IN TENDERING & OTHER BUSINESS DEALINGS"

Dear Sir,

IREL (INDIA) LIMITED, a Government of India undertaking under the administrative control of Department of Atomic Energy is doing its business as per the rules and regulation of the Public Sector Undertaking and other statutory agencies. The business is done in an ethical, rational & impartial manner with good corporate governance.

In our endeavour to be more transparent in our dealings and to support our ideology all Vendors, Customers and Business Partners are requested not to provide any gift and / or inducement to any of our employees for securing / being granted favour in dealings with our Company. In assurance of your commitment to the aforesaid, it will be highly appreciated if you fill up, sign and abide by the attached undertakings.

Report of any gifts and / or inducements sought by any employee of the company should be immediately reported to any one of the following:

Chairman & Managing Director	Chief Vigilance Officer
IREL (India) Limited	IREL (India) Limited
1207, V.S. Marg, Prabhadevi	1207, V.S. Marg, Prabhadevi
Mumbai 400 028.	Mumbai 400 028.
Ph: 022-24225778	Ph: 022-24221068
E-mail:cmd@irel.co.in	E-mail:cvo@co.gov.in

We assure you that complaints if any made by you on the subject will be kept confidential and fair investigation will be conducted and appropriate action will be taken. Similarly, we except your commitment to the undertaking and its violation will have consequences as per prevailing rule of the Company.

Thanking you,

For IREL (India) Limited

Sd/-

Name R. Abel Devadhason Designation Chief Manager- (Technical (Purchase)

# UNDERTAKING TO BE SUBMITTED BY BIDDERS FOR ADOPTING ETHICAL PRACTICES

Date:

IREL (India) Limited 1207, V.S. Marg, Prabhadevi Mumbai 400 028.
I / We
I / We agree and undertake:
Not to provide any gift and / or inducement to any employee of the Company in connection with securing / being granted favour (s) in my / our dealings with the Corporate office of the company and / or its any field units namely MK, Chavara, OSCOM, RED & IRERC.
To immediately report any gift and / or inducement sought by any employee of the Company granting favour(s) to me / us in my / our dealings with the Company and / or its field units.
Signature
Name
Title
Name of the Company and Address (with Seal)

## **EMD DECLARATION**

l	have	furnished	a	sum	of	Rs.	/-	(.	(Rupeesonly)	towards	EMD	vide
NI	EFT/R	TGS/BG N	Jo				. dated					
Pla	ace:								Signature of tenderer:			
									Full Address:			

## **IREL Bank Details**

Name of Bank	State Bank of India, Udyogamandal Branch,
	Udyogamandal
Account Type	Current Account
Account Number	57017844321
IFSC Code	SBIN0070158
MICR Code	682002926

Details of payment to be uploaded as attachment during tender submission and the same shall be e-mailed to: <a href="mailed-e-mai

Email should contain the following details

- 1) Name of the Company.
- 2) Your E-mail ID and Contact Details including full postal Address.
- 3) EMD & TDC Amount.
- 4) Transaction ID with details of bank and branch.

## TECHNICAL DEVIATION STATEMENT FORM

CLAUSE	DEVIATION	REMARKS
	(Including Justification)	
re & Seal of the Tenderer		
ere there is no deviatio viations'	n, the statement should be returned duly	signed with an endorsement indic

Tender No. / Date:

Name of Work:.

# **DECLARATION - NON-BLACKLISTING**

(To be submitted by an Authorized S	Signatory on the company's original letter he	ad with signature and seal)
To,		
CM -Technical (Purchase) IREL (India) Limited R E Division, Udyogamandal - 683 KERALA	501	
Sir,		
In response to the Bid Ref No.:	dated 2	2023, I/We hereby declare that
presently our agency has not been of	declared ineligible or black listed for corrup	ot & fraudulent practices either
indefinitely or for a particular period	od of time by any State Govt./ Central Go	vt./PSU/Government of India
Society on the date of bid submission	n.	
If this declaration is found to be inc	correct then without prejudice to any other	action that may be taken my/
our bid if any, to the extent accepted	- , ,	action that may be taken, my,
J, 1	,	
		Thanking you,
		Yours faithfully,
	Name of the agency: - Authorized Signatory: - Seal of the Organization: -	
Date:		
Place:		

# **Annexure to Bid Form: Eligibility Declarations**

Tender Document No.	
Tender Title:	
Bidder's Name:	
Bidder's Reference No.	Date:
Restrictions on procurement from Bidders from a country	y or countries, or a class of countries under
Rule 144 (xi) of the General financial Rules 2017.	
"I/We have read the clause regarding restrictions on procure a land border with India: and solemnly certify that we are	•
country, has been registered with the Competent Authorit requirements in this regard and is eligible to be considered.	
Penalties for false or misleading declarations:	
We hereby confirm that the particulars given above are factuundertake to advise any future changes to the above details.	•
self-declaration by us would be violation of Code of integrit this tender document, including debarment.	y and would attract penalties as mentioned in
	(Signature of the Bidder, with Official Seal)

## CONTRACTOR ENROLMENT/ REGISTRATION FORM

1. NA	AME		:								
2. AE	DDRESS		:								
3. E-N	MAIL/ M	OBILE	:								
4. WO	ORK ORI	DER DETA	ILS :								
Sl. No	Work C & Date	Order No.	Work Order Validity			N	Nature of Work		Dept.		EIC/ OIC Name
			Fron	n	То						- 10
5. P.F	. CODE 1	NO	:								
6. IN	SURANC	E DETAIL	S:								
ESI N	0.	Name of Insurance Company	e	Policy	No.		Valid	Type of	Policy	7	No. of persons covered
7. LA	BOUR L	(CENSE D	ETAILS	S:							
Labour License No.		Address of Licensing Office		License Issuance Authority		I			mum No. of ure's as per ase		
						1				<u> </u>	

SIGNATURE OF CONTRACTOR

	VENDOR UP-DAT		
SI#	Organisa	ation Details	
1	Name		
2	Address Type (Sales office address / Office Address / warehouse Address / Factory Address)		
	Building / House Number		
	Area/Street Name		
	City		
	State		
	Pin Code		
		Ph No:	
	Contact Details	Mobile No.	
		Email:	
3	Vendor Type ( Domestic / Import)		
4	Ownership Information (Private Limited Company/ One Person Company/ Limited Liability Partnership/ Partnership Firm / Proprietorship/ Co-Operative Society/ Trust/ Others).		
5	Whether Approved By Any Central Government/State Government/ Public Sector Undertakings / Reputed Private Organisations for similar items, for which registration is sought.		
6	PAN No. Copy of the same may be		
7	GSTIN ID attached.		
8	Audited copies of P&L for the last three FY		_
9	Valid MSE Udyam registration certificate, if any.	Yes	No
10	MSE ownership details.		1
11	ISO Certification if any		
12	Registered in GEM Portal	Yes	No
13	MSE to confirm if they are registered from TReDs platform	Yes	No
14	Whether supplier/Service Provider is a Start- Up Enterprise. If yes provide the details.		
15	Whether she Company is under Litigation/Arbitration cases during last 5 years?	Yes	No
16	Whether company has been delisted/debarred from business with any PSU in India, and the reasons thereof?		
17		Details	
I	Name of bank:		

Name of Bank Branch:	
City/Place:	
Account Number:	
Account Type:	
IFSC Code:	
MICR Code:	
Swift Code	
Self-attested or Bank attested Bank details on	
Company letterhead or cancelled cheque	
Current year Solvency Certificate	

# PROFORMA FOR BANK GUARANTEE FOR EARNEST MONEY DEPOSIT (EMD)

(To be issued by approved Scheduled Banks)

In accordance with Notice Inviting Tender (NIT) No Dated for the work of (herein after referred to as "the said Works") for Rs (Rupees only), under RED unit of M/s IREL(India) Limited, a company incorporated under Indian Companies Act, having its registered office at Plot No.1207, ECIL building, Opp. to Siddhivinayak Temple, Veer Savarkar Marg, Prabhadevi, Mumbai-400028, India (herein after referred to as IREL (India) Limited, M/s Address [Herein after referred to as Contractor (s)] wish /wishes to participate in the said tender and a Bank Guarantee for the sum of Rs (in words) valid for a period of days (in words) is required to be submitted by the Bidder towards the Bid Security.
We theBank (hereinafter called the said Bank) do hereby undertake to pay to IREL (India) Limited, the sum of Rs (Rupees only) by reason of the said tenderer's failure to enter into an agreement of contract on intimation of acceptance of his tender and/or to commence the contract works and/or failure to deposit the security deposit within the stipulated period as per the terms and conditions relating to and/or governing the contract and/or specified in the Notice Inviting Tender (NIT). We also agree that any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. We also agree that notwithstanding any dispute or difference or any litigation in respect of or arising from the said contract and/or the acceptance of the tender of the tenderer afore stated by IREL(India) Limited including the question as to the tenability of the claim of the IREL(India) Limited for forfeiting the Earnest Money being the Bank Guarantee herein, we shall forthwith pay the said amount to IREL(India) Limited on demand being made as aforesaid.
We Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for entering into an Agreement of contract and that it shall continue to be enforceable till all the dues of the IREL(India) Limited under the terms and conditions of the NIT for the work have been fully paid and its claims satisfied or discharged or till IREL(India) Limited certifies, that the terms and conditions of the NIT have been fully and properly carried out by the said tenderer and accordingly discharges the guarantee.
WeBank further agree with the IREL(India) Limited that the IREL(India) Limited shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the NIT and/or terms and conditions governing the contract or to extend the time of validity of the offer from the said tenderer from time to time or to postpone for any time or from time to time any of the powers exercisable by the IREL against the said tenderer and to forbear or enforce any of the terms and conditions of the NIT and we shall not be relieved from our liability hereunder by reason of any such variation, or extension being granted to the said tenderer or for any forbearance, act or omission on the part of the IREL(India) Limited or any indulgence by the IREL(India) Limited to the said tenderer or by any such matter or thing whatsoever which under the law relating to surety/guarantee would but for this provision have effect of so relieving us.

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day of 20
day of 20
Bank
Attorney Nodt)
Bank's Common seal
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Bid Number/बोली क्रमांक (बिड संख्या) GEM/2024/B/4539523 Dated/दिनांक : 27-01-2024

# Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण				
Bid End Date/Time/बिड बंद होने की तारीख/समय	12-02-2024 11:00:00			
Bid Opening Date/Time/बिंड खुलने की तारीख/समय	12-02-2024 11:30:00			
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	90 (Days)			
Ministry/State Name/मंत्रालय/राज्य का नाम	Pmo			
Department Name/विभाग का नाम	Department Of Atomic Energy			
Organisation Name/संगठन का नाम	Irel (india) Limited			
Office Name/कार्यालय का नाम	Но			
Total Quantity/कुल मात्रा	316			
ltem Category/मद केटेगरी	Title1, Title2, Title3, Title4, Title5, Title6, Title7, Title8, Title9, Title10, Title11, Title12, Title13, Title14, Title15, Title16, Title17			
BOQ Title/बीओक्यू शीर्षक	Supply Installation commissioning of Solar power plant			
Minimum Average Annual Turnover of the bidder (For 3 Years)/बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का)	15 Lakh (s)			
Years of Past Experience Required for same/similar service/उन्हीं/समान सेवाओं के लिए अपेक्षित विगत अनुभव के वर्ष	3 Year (s)			
MSE Exemption for Years Of Experience/अनुभव के वर्षों से एमएसई छूट/ and Turnover/टर्नओवर के लिए एमएसई को छूट प्राप्त है	Yes			
Startup Exemption for Years Of Experience/अनुभव के वर्षों से स्टार्टअप छूट/ and Turnover/ टर्नओवर के लिए स्टार्टअप को छूट प्राप्त है	Yes			
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Experience Criteria, Bidder Turnover, Certificate (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer			
Bid to RA enabled/बिंड से रिवर्स नीलामी सक्रिय किया	No			

Bid Details/बिड विवरण		
Type of Bid/बिंड का प्रकार	Two Packet Bid	
Primary product category	Title1	
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days	
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No	
Estimated Bid Value/अनुमानित बिड मूल्य	5000000	
Payment Timelines	Payments shall be made to the Seller within <b>30</b> days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)	
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation	

## EMD Detail/ईएमडी विवरण

Advisory Bank/एडवाईजरी बैंक	State Bank of India
EMD Amount/ईएमडी राशि	100000

## ePBG Detail/ईपीबीजी विवरण

Advisory Bank/एडवाइजरी बैंक	State Bank of India
ePBG Percentage(%)/ईपीबीजी प्रतिशत (%)	5.00
Duration of ePBG required (Months)/ईपीबीजी की अपेक्षित अवधि (महीने).	61

- (a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy./जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने हैं। एमएसई केटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।
- (b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable./ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए।

## Beneficiary/लाभार्थी:

DGM Finance (A& E) IREL (India) Limited, RED, Udyogamandal (Kamalam.p)

#### Splitting/विभाजन

Bid splitting not applied/बोली विभाजन लागू नहीं किया गया.

## MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes

#### MSE Purchase Preference/एमएसई खरीद वरीयता

. Iz		
	MSE Purchase Preference/एमएसई खरीद वरीयता	Yes

- 1. If the bidder is a Micro or Small Enterprise as per latest definitions under MSME rules, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- 2. If the bidder is a Startup, the bidder shall be exempted from the requirement of "Bidder Turnover" criteria and "Experience Criteria" subject to their meeting of quality and technical specifications. If the bidder is OEM of the offered products, it would be exempted from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. In case any bidder is seeking exemption from Turnover / Experience Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer.
- 3. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
- 4. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
- 5. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.
- OM\_No.1\_4\_2021\_PPD\_dated\_18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.
- 6. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for

Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY. The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023 OM No.1 4 2021 PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. 7. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

#### Title1

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

#### Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title2

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अईता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title3

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title4

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier

respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

## Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	<u>View File</u>

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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title5

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title6

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	<u>View File</u>

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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती / रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title7

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	<u>View File</u>

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title8

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	<u>View File</u>

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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title9

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title10

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

# Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती / रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	300	300

#### Title11

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title12

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	View File
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Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	300

#### Title13

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अईता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
BOQ Detail Document	<u>View File</u>

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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	365

#### Title14

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	365

#### Title15

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	365

#### Title16

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

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## Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती / रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	365

#### Title17

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Specification Document	<u>View File</u>
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# Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती / रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	R Abel Devadhason	683501,IREL (India) Limited; UDYOGMANDAL,Ernakulam.	1	365

# Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

#### 1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

#### 2. Generic

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- a. Copy of PAN Card.
- b. Copy of GSTIN.
- c. Copy of Cancelled Cheque.
- d. Copy of EFT Mandate duly certified by Bank.

## Disclaimer/अस्वीकरण

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. Any clause(s) incorporated by the Buyer regarding following shall be treated as null and void and would not be considered as part of bid:-

- 1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
- 2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
- 3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
- 4. Creating BoQ bid for single item.
- 5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
- 6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
- 7. Floating / creation of work contracts as Custom Bids in Services.
- 8. Seeking sample with bid or approval of samples during bid evaluation process.
- 9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
- 10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
- 11. Creating bid for items from irrelevant categories.
- 12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
- 13. Reference of conditions published on any external site or reference to external documents/clauses.
- 14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer

is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

## This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो।बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।

---Thank You/धन्यवाद---