भारतीय राष्ट्रीय महासागर सूचना सेवा केंद्र
पृथ्वी विज्ञान मंत्रालय, भारत सरकार
"ओशियन वैली", प्रगति नगर (बी. ओ), निज़ामपेट (एस. ओ), हैदराबाद – 500 090
दूरभाष सं. 040-2388 6002 / 23886074 फैक्स : 040-2389 2910 / 2389 5001
INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION SERVICES
Ministry of Earth Sciences, Government of India
"Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad - 500 090
Phone No.040-2388 6002/23886074 Fax: 040-2389 2910/2389 5001

इंकॉइस:क्रय: 11/2025
Ref. INCOIS: PUR: 11/2025

दिनांक: 26.10.2026
Date: 26.10. 2026

सरकारी ई बाज़ार द्वारा निविदा सूचना आमंत्रण
Notice Inviting Tender through Government E Market Place (GeM)

भारतीय राष्ट्रीय महासागर सूचना सेवा केंद्र, हैदराबाद भारत सरकार के पृथ्वी विज्ञान मंत्रालय के अंतर्गत एक स्वायत्त निकाय है।
Indian National Centre for Ocean Information Services (INCOIS), Hyderabad is an autonomous body under Ministry of Earth Sciences, Government of India.

निम्न विवरणों के लिए पंजीकृत विक्रेताओं से निविदाएं /बोलियां आमंत्रित की जाती हैं। जीईएम अधिप्रापण होने के नाते, बोलियां केवल **Government E-Market Place (GeM)/ http://gem.gov.in** द्वारा ऑनलाइन से ही जमा करनी होती हैं। एनआईटी का संक्षिप्त विवरण नीचे दिया जा रहा है:
Tenders/Bids are invited from registered vendors of GeM for the following items. Being a GeM procurement, the bids has to be submitted online through **Government E- Market Place (GeM) http://gem.gov.in/** only. The brief details of NIT are appended below.

क्र. संSl. No	कार्य का नाम Name of the Work	बोली संदर्भ सं. Bid Reference No.	बोली संख्या एवं दिनांक Bid Number and Date	बोली समाप्ति की तारीख और समय Bid end date and Time
(1)	"हैदराबाद स्थित INCOIS में 960 USGPM क्षमता वाले एक द्वि-सेल FRP शीतलन टावर की ऊंचे प्लेटफॉर्म पर आपूर्ति, स्थापना, परीक्षण एवं कमीशनिंग का कार्य, जिसमें कंडेंसर जल पाइपिंग, वाल्व, नियंत्रण पैनल एवं केबलिंग शामिल हैं; दो मौजूदा कंडेंसर पंपों का स्थानांतरण तथा तीन पुराने 125 TR क्षमता वाले कूलिंग टावरों का बाय-बैक (पुनर्खरीद) भी शामिल है। इस कार्य के अंतर्गत तीन वर्ष की व्यापक ऑन-साइट वारंटी भी प्रदान की जाएगी। **"Supply, installation, testing and commissioning of 01 twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of 02 existing condenser pumps, under buy-back of three old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad.**	इंकॉइस:क्रय: 11/2025 INCOIS:PUR: 11/2025	जीईएम/2026/बी/8195248 दिनांक: 23.10.2026 GEM/2026/B/8195248 dated 23.10.2026	16.11.2026 19:00:00

जीईएम अधिप्रापण होने के नाते बोलियां केवल जीईएम पोर्टल अर्थात http://gem.gov.in के अंतर्गत बोली/आरए कॉलम द्वारा ऑनलाइन ही जमा करनी होती हैं। किसी भी प्रकार की सहायता के लिए कृपया जीईएम पोर्टल की हेल्प लाइन से संपर्क करें। निम्न अधिकारियों से भी संपर्क किया जा सकता है: श्री वी. सुब्रह्मण्यम (ईमेल: manyam@incois.gov.in;) / श्री संतोष कुमार (ईमेल: santosh.kumar@incois.gov.in)

Being a GeM procurement, the bid has to be submitted online through the GeM portal i.e., http://gem.gov.in under the Bids/RAs column. For any assistance, please contact help line of GeM portal. The following officials may also be contacted: Mr. V. Subrahmanyam (email: manyam@incois.gov.in;)/Mr. Santosh Kumar (email: santosh.kumar@incois.gov.in).

भारतीय राष्ट्रीय महासागर सूचना सेवा केंद्र Indian National Centre for Ocean Information Services INCOIS Hyd. हैदराबाद

(वी. सुब्रह्मण्यम /V. Subrahmanyam)
प्रशासनिक अधिकारी (क्रय)/ Administrative Officer (Purchase)
निविदा आमंत्रण प्राधिकारी, इंकॉइस/
Tender Inviting Authority, INCOIS

बिड संख्या/Bid Number: GEM/2026/B/8195248
दिनांक /Dated: 23-10-2026

बिड दस्तावेज़ / Bid Document

बिड विवरण/Bid Details	
बिड बंद होने की तारीख/समय /Bid End Date/Time	16-11-2026 19:00:00
बिड खुलने की तारीख/समय /Bid Opening Date/Time	17-11-2026 19:00:00
बिड पेशकश वैधता (बंद होने की तारीख से)/Bid Offer Validity (From End Date)	90 (Days)
मंत्रालय/राज्य का नाम/Ministry/State Name	Ministry Of Earth Sciences
विभाग का नाम/Department Name	Department Of Earth Sciences
संगठन का नाम/Organisation Name	Earth Sciences Secretariate
कार्यालय का नाम/Office Name	Indian National Centre For Ocean Information Servi
शिकायत निवारण के संपर्क विवरण/ Contact details of Grievance redressal	HOD Email id :bala@incois.gov.in Buyer Email id: santosh.kumar@incois.gov.in
कुल मात्रा/Total Quantity	1
वस्तु श्रेणी /Item Category	SITC of 01 twin-cell FRP cooling tower of 960 USGPM
GeMARPTS में खोजी गई स्ट्रिंग्स / Searched Strings used in GeMARPTS	FRP COOLING TOWER
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Fan Blades for Cooling Tower fan Rev 1, Portable Emergency LED Lighting Tower System with Battery Bank, FRP Bench, FRP SECURITY CABIN, Drinking Water Coolers (V4) ISI Marked To IS 1475, FRP Storage Tank (V2), Tower Ladder (V2), Boom Tower / Water Tower for Fire Fighting, Flower Pots Or Planters (V3), FRP Urinal Cabin (V2)
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	• Fan Blades for Cooling Tower fan Rev 1 • Multiple Split System Air Conditioners and Air to Air Heat Pumps (VRF Air Conditioners) Conforming to IS 18728 • Panel Air Conditioner
पिछले 3 वित्तीय वर्षों का बिडर का न्यूनतम औसत वार्षिक वित्तीय टर्नओवर/Minimum Average Annual Turnover of the bidder (For the last 3 Financial Years)	21 Lakh (s)
उन्हीं/समान सेवा के लिए अपेक्षित विगत अनुभव के वर्ष/Years of Past Experience Required for same/similar service	3 Year (s)
टर्नओवर पात्रता मानदंड/Turnover eligibility criteria	GeM verified turnover

बिड विवरण/Bid Details	
वर्षों के अनुभव एवं टर्नओवर से एमएसई को छूट प्राप्त है / MSE Relaxation for Years Of Experience and Turnover	Yes | Complete
स्टार्टअप के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है / Startup Relaxation for Years Of Experience and Turnover	Yes | Complete
विक्रेता से मांगे गए दस्तावेज़/Document required from seller	Experience Criteria,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,Additional Doc 1 (Requested in ATC),Compliance of BoQ specification and supporting document *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
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेज़ों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेनू है/Do you want to show documents uploaded by bidders to all bidders participated in bid?	Yes (Documents submitted as part of a clarification or representation during the tender/bid process will also be displayed to other participated bidders after log in)
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / Minimum number of bids required to disable automatic bid extension	1
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / Number of days for which Bid would be auto-extended	7
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / Number of Auto Extension count	1
बिड से रिवर्स नीलामी सक्रिय किया/Bid to RA enabled	No
बिड का प्रकार/Type of Bid	Two Packet Bid
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय /Time allowed for Technical Clarifications during technical evaluation	4 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
मूल्यांकन पद्धति/Evaluation Method	Total value wise evaluation
वित्तीय दस्तावेज की आवश्यकता है / Financial Document Required	Yes
मध्यस्थता खंड/Arbitration Clause	No
सुलह खंड/Mediation Clause	No

ईएमडी विवरण/EMD Detail

एडवाईजरी बैंक/Advisory Bank	State Bank of India
ईएमडी राशि/EMD Amount	84000

ईपीबीजी विवरण /ePBG Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईपीबीजी प्रतिशत (%)/ePBG Percentage(%)	5.00
ईपीबीजी की आवश्यक अवधि (माह) /Duration of ePBG required (Months).	38

(a). जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित केटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने है। 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।/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.

(b).ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए। / EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

(c).ईएमडी और संपादन जमानत राशि लाभार्थी के पक्ष में होनी चाहिए। / Earnest Money Deposit (EMD) shall also be accepted by the buyer in the form of a surety bond.

लाभार्थी /Beneficiary :
Director INCOIS
Payable at Hyderabad, Indian National Centre for Ocean Information Services, Ministry of Earth Sciences, Pragathi Nagar, Hyderabad 500090
(Director Incois)

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

एमआईआई खरीद वरीयता / MII Purchase Preference

एमआईआई खरीद वरीयता / MII Purchase Preference	Yes
मेक इन इंडिया विक्रेताओं को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% तक की सीमा में है / Purchase Preference to MII sellers availabele upto price within L1+X%	20
मेक इन इंडिया खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MII purchase preference	50

सार्वजनिक खरीद (मेक-इन-इंडिया को प्राथमिकता) आदेश 2017 के अनुसार केवल क्लास 1/क्लास 2 के स्थानीय आपूर्तिकर्ताओं को ही भागीदारी की अनुमति है दिनांक 16.09.2020 (समय-समय पर संशोधित एवं लागू) / Allow participation only from Class 1/Class 2 local suppliers as per the Public procurement(Preference to Make-in-india) order 2017 date 16.09.2020(as amended and applicable time to time)	Yes, in compliance with the MII ORDER : DPIIT Order(as amended and applicable time to time)

एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं/सेवा प्रदाता को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% / Purchase Preference to MSE OEMs/ Service Provider available upto price within L1+X%	15
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माता/सेवा प्रदाता को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Percentage of Bid quantity/amount for MSE OEMs/ Service Provider Purchase preference	25

1. If the bidder is a Micro or Small Enterprise as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Experience Criteria" as defined above subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation.
2. If the bidder is a Micro or Small Enterprise (MSE) as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Bidder Turnover" as defined above subject to meeting of quality and technical specifications. If the bidder itself is MSE OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover, shall upload the supporting documents to prove his eligibility for Relaxation.
3. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Experience Criteria" as defined above subject to their meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation.
4. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Bidder Turnover" as defined above subject to their meeting of quality and technical specifications. If the bidder is DPIIT Registered OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover shall upload the supporting documents to prove his eligibility for Relaxation.
5. The minimum average annual financial turnover of the bidder during the last three financial years, ending on 31st March of the previous financial year, should be as indicated in the bid document. The turnover of the bidder shall be validated by the system based on the financial data available on the GeM portal. The average turnover shall be calculated based on the last three financial years where data is available; in case data is available for only two of the last three financial years, the average shall be computed based on those two years. In case the date of constitution / incorporation of the bidder is less than three years old, the average turnover in respect of the completed financial years after the date of constitution / incorporation shall be taken into account for this criterion. No separate documentary evidence is required to be uploaded by the bidder for this criterion, as the system shall derive and validate the turnover figures from the data available on the GeM portal.
6. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offered in the bid {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC 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.
7. 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 and its subsequent Orders/Notifications issued by concerned Ministry .Benefits of MSE will be allowed only if seller/service provider is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

8. **Purchase preference to Micro and Small Enterprises (MSEs):** Purchase preference will be given to MSEs having valid Udyam Certificate and whose credentials are validated online through Udyam Registration portal 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 themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service, and Buyer will decide eligibility for purchase preference based on documentary evidence submitted in case of product bids, whereas in case of services the eligibility is automatically validated. 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 MSE 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.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. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

एक्सेल में अपलोड किए जाने की आवश्यकता /Excel Upload Required :

Price Bid - 1792759148.xlsx

Pre Bid Detail(s)

मूल्य भिन्नता खंड दस्तावेज़/Pre-Bid Date and Time	प्री-बिड स्थान/Pre-Bid Venue
03-11-2026 11:00:00	Pre Bid (Hybrid) at 11:00 AM at INCOIS, Hyderabad

SITC Of 01 Twin-cell FRP Cooling Tower Of 960 USGPM (1 Unit)

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

तकनीकी विशिष्टियाँ /Technical Specifications

क्रेता विशिष्टि दस्तावेज़ /Buyer Specification Document	Download

उपरोक्त मद के लिए इंस्टॉलेशन कमीशनिंग एंड टेस्टिंग (आईसीटी) का विवरण / Installation Commissioning and Testing (ICT) details for the above item:

% of Product Cost Payable on Product Delivery	70%
Min Cost Allocation for ICT as a % of product cost	30%
Number of days allowed for ICT after site readiness communication to seller	112 Days

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

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Reddipalli Velangini Giridhar	500090,Indian National Centre for Ocean Information Services (INCOIS), Ministry of Earth Sciences, Government of India, Ocean valley, Pragathi Nagar BO, Nizampet SO, Hyderabad - 50090 INDIA	1	112

Buyer added Bid Specific Additional Scope of Work

क्र.सं./S.No.	Document Title	Description	रिवर्स प्रभार के अनुसार जीएसटी/Applicable i.r.o. Items
1	SITC of 01 twin-cell FRP cooling tower of 960 USGPM View	Scope of Work , Technical Specifications, Eligibility Criteria and Terms and Conditions	SITC Of 01 Twin-cell FRP Cooling Tower Of 960 USGPM(1)

The uploaded document only contains Buyer specific Additional Scope of Work and / or Drawings for the bid items added with due approval of Buyer's competent authority. Buyer has certified that these additional scope and drawings are generalized and would not lead to any restrictive bidding.

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

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 up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be (Increased quantity ÷ Original quantity) × Original delivery period (in days), subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the

original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

2. **Buyer Added Bid Specific ATC**

Buyer Added text based ATC clauses

SITC of 01 twin-cell FRP cooling tower of 960 USGPM on a raised platform, with conden ser water piping, valves, control panel and cabling, and shifting of 02 existing condens er pumps, under buy-back of three old 125 TR cooling towers, with three (3) years com prehensive on-site warranty, at INCOIS, Hyderabad.

Buy-back, testing, commissioning and warranty Clause:

Removal and buy-back of the old cooling towers [BoQ item 18]

a) Scope of Buy-Back (As-Is-Where-Is): Three old 125 TR cooling towers and their listed accessories are offered for buy-back on an "as is where is" basis with no warranty from INCOIS,

b) Bidders must quote a single consolidated buy-back value excluding GST, alongside a per-tower brea kdown, as a separate field that cannot be deducted from any standard BoQ item line.

c) INCOIS reserves the right to Exercise/Not Exercise Buy Back Option. However, the bidders must quot e separately as per Annexure VII-B and to be uploaded under financial document only, in which case t he contractor must still dismantle and stack the towers under BoQ Item 18 at no extra cost.

d) Bidders should note that Buyback value will not be part in deciding L1.

e) The old cooling towers must remain fully operational until the new tower passes its 72-hour continuo us trial run and is formally accepted in writing.

f) Dismantling must be done using an approved crane lifting plan without damaging RC pedestals, whi le ensuring waterproofing restoration, pipe blanking, and complete removal and labelling of old fan fe eder cabling.

g) All hazardous lubricants must be drained into leak-proof containers and handed over to a TGPCB-aut horized recycler, with mandatory submission of disposal manifests to INCOIS.

h) Financial Adjustment: The buy-back transaction will be processed via recovery against works contra ct payments as a credit deduction in the contractor's tax invoice, or it will be unilaterally recovered by INCOIS from the Second Milestone Payment.

i) All buy-back scrap must be cleared from the campus within seven days of handover using a valid m aterial gate pass to avoid storage charges.

Warranty period: 3 years comprehensive on-site warranty from the date of acceptance, as per C lause 5.6: year 1 within items 1 to 19, years 2 and 3 under item 20.

Payment terms:

(a) Milestone 1: After Supply (70% Payment)
70% of the contract value for items 1 to 19 will be released within 30 days of the physical delivery of all m aterials at the INCOIS campus, Hyderabad. For items paid on joint measurement (Items 2 and 12 to 16), th is 70% progress payment will be calculated based on actual quantities delivered to the site. Payment will be processed against the submission of the following documents:

a) Joint Receipt Inspection Report (JRIR) signed by both INCOIS and the contractor.

b) Original Manufacturer (OEM) test certificates for major equipment (cooling tower components, mot ors, VFDs).

c. Factory Test Report for the control panel CP-01.

d. d) Original ink-signed tax invoice.

e. e) Proof of valid Transit, Storage, and Erection All-Risk Insurance policies.

(b) Milestone 2: Final Payment After Installation, Commissioning & Handover (30% Payment minus Buy-Back)
The balance 30% of the contract value for items 1 to 19 will be released within 30 days of the satisfactory completion of the entire scope of work, including successful installation, testing, commissioning, performance check, 72-hour continuous trial run, and formal written acceptance by the Engineer-in-Charge.

- Quantity Adjustments: Final payment for measurement-based items (Items 2 and 12 to 16) and approved variations will be reconciled and adjusted based on final joint measurements in this bill.
- **Buy-Back:** If INCOIS exercises the buy-back option, the single consolidated buy-back value quoted by the contractor plus applicable GST must be shown as a clear, distinct credit deduction/discount item inside this final milestone tax invoice. If the contractor fails to incorporate this credit value, INCOIS shall unilaterally recover the entire buy-back amount plus applicable GST from the gross payable amount under this bill. The old towers shall only be dismantled and removed under BoQ Item 18 after the new system passes the 72-hour trial run and is accepted.
- **Prerequisite Documents:** Payment is subject to the submission of the Final Acceptance Certificate, all handover/as-built documentation (including PLC/VFD parameters, passwords, O&M manuals), and the submission of a valid Performance Security (e-PBG/Bank Guarantee) as per Point 7.

(c) Payout for Comprehensive On-Site Warranty (Item 20)
The quoted annual rate for the 2nd and 3rd years of the Comprehensive On-Site Warranty under BoQ Item 20 will be paid on an annual, deferred basis at the end of each respective warranty year. Payouts are strictly subject to the submission of satisfactory bi-annual preventive maintenance service reports signed by the Engineer-in-Charge and the deduction of recoveries, if any, for delayed rectifications as per Clause 5.6. The 1st year of the warranty is built into the capital costs of items 1 to 19 and carries no separate payout.

Old Cooling Towers Offered for Buy-back

Details of the old towers:

The towers below are offered on "as is where is" basis. INCOIS gives no warranty on their condition. Bidders shall satisfy themselves at the site visit.

Sl.	Tower	Capacity	Year	Make / model / Sr. No.	Type	Present condition
1	CT-1, Substation terrace	125 TR	2004	Paharpur	FRP, induced draft, axial fan	Not Working
2	CT-2, Substation terrace	125 TR	2004	Paharpur	FRP, induced draft, axial fan	Not Working
3	CT-3, Substation terrace	125 TR	2004	Paharpur	FRP, induced draft, axial fan	Not Working

Included with each tower: fan, motor, drive, basin, MS support frame on the pedestals, local piping up to the cut points fixed at the joint survey, and the old fan feeder cables. The RC pedestals and the terrace slab remain with INCOIS and shall not be disturbed.

3. **Buyer Added Bid Specific ATC**

Buyer uploaded ATC document Click here to view the file.

स्वीकरण/Disclaimer

The Additional Terms and Conditions (ATC) have been incorporated by the Buyer after approval of their Competent Authority. The Buyer ,is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any restriction arising in the bidding process due to these ATCs and including the modification of technical specifications and / or terms and conditions governing the bid.All representations / grievances pertaining to the ATC clauses shall be raised with the buyer organization directly and not with GeM.If any of the clause(s) is/are incorporated by the Buyer regarding the following, the bid & resultant contract shall be treated as null & void. Further, GeM reserves the right, at its sole discretion, to cancel the bid forthwith, without issuance of any prior notice or intimation :-

1. Publishing Custom / BOQ bids for items for which regular GeM categories are available (unless such Custom / BOQ item is bunched with the major regular product Category Item).
2. Mandating procurement of / from specific Brand / Make / Model / Manufacturer / Dealer except in case of Single Bid / Proprietary Article Certificate (PAC) Buying.
3. Inclusion of disqualification criteria related to suspension of seller / service provider, where such suspension period has already expired.
4. Mandating submission of documents (other than EMD and signed Integrity Pact - which can be submitted within 5 days of bid opening) in physical form as a pre-requisite to qualify bidders.
5. Publishing bids on GeM for procurement of works.
6. Procurement of Goods by creating a Service bid on GeM & vice-versa.
7. Seeking sample with bid or approval of samples during bid evaluation process. However, trial / sample, as the case may be, shall be permitted in cases where trial / sample are allowed as per approved and published procurement policy of the Buyers' controlling Ministry / Department / State / Public Sector Enterprises Headquarters. If there is any violation of trial / sample clause with regard to approved policy of the Buyers' Ministry / Department / State / Public Sector Enterprises Headquarters, then this is to be determined and redressed by the concerned Buyer Organisation only.
8. Seeking experience from specific organization / department / institute only or from foreign / export experience.
9. Creating bid for items from incorrect categories.
10. Reference of conditions published on any external site or reference to external documents/clauses.
11. Asking for any Tender fee / Bid Participation fee, as the case may be.
12. Buyer added ATC Clauses which are in contravention of clauses defined in bid detail section, including specifications, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by the applicable GeM GTC.
13. Any ATC clause in contravention with GeM GTC Clause 4 (xiii) (h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.
14. In a category based bid, adding additional items, through buyer added, additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogues or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

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. 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.

All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including the provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into force by the Government of India.

For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972, etc. and relevant State Rules)

shall continue to remain applicable.

The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:

- **All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and**
- **All operative provisions of the erstwhile Labour Laws until their complete substitution.**

All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and any other statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.

This Bid is governed by the General Terms and Conditions, conditions stipulated in Bid and Service Level Agreement specific to the Service, as the case may be, as provided in the Marketplace.

However, in case of Service, if any condition specified in General Terms and Conditions is contradicted by the conditions stipulated in Service Level Agreement specific to said Service, then it will over-ride the conditions in the General Terms and Conditions.

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

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।/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.

---धन्यवाद/Thank You---

INCOIS:PUR: 11/2025 **Date:23.10.2026**

Open Tender Enquiry (OTE)

Sub: "Supply, installation, testing and commissioning of 01 twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of 02 existing condenser pumps, under buy-back of three old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad"

Director, INCOIS invites tenders in "Two Bid System" (Part-I Techno-commercial Bid and Part-II Financial Bid) from contractors with appropriate registration, having adequate resources and set-up for supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three years comprehensive on-site warranty, at INCOIS, Hyderabad.

1.	**Name of the work**	Supply, installation, testing and commissioning of 01 twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of 02 existing condenser pumps, under buy-back of three old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad
2.	**BID Reference No.**	INCOIS:PUR: 11/2025
3.	**Earnest Money Deposit (EMD)**	Rs. 84,000/- (Rupees eighty four thousand only)
4.	**Pre Bid Conference (Hybrid)**	03.11.2026 at INCOIS, Hyderabad
5.	**Site visit (mandatory)**	From 25.10.2026 up to15.11.2026 (working days), 10:00 to 16:00 hrs, at INCOIS, Hyderabad, with prior appointment.
6.	**Last date for seeking the clarifications**	27.10.2026
7.	**Due date for bid submission**	16.11.2026 at 15:00 hrs
8.	**Bid opening date**	17.11.2026 at 15:00 hrs

The offers, in the prescribed format, shall be submitted online through the Government e-Marketplace at http://gem.gov.in.

Postal / Location Address

Indian National Centre for Ocean Information Services (INCOIS) Ministry of Earth Sciences, Govt. of India
"Ocean Valley", Pragathi Nagar (BO), Nizampet (SO), Hyderabad 500 090. Ph. No. 040-2388 6000

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1. Introduction

1.1 The Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, an autonomous body under the Ministry of Earth Sciences (MoES), Govt. of India, provides ocean information and advisory services, including tsunami early warning, ocean state forecasts, ocean observations, ocean modelling, satellite oceanography and data services. Its laboratories and data centre need air conditioning round the clock.

1.2 The AC plant room in the Substation building has four water-cooled chillers (3 × 100 TR and 1 × 217 TR) and four condenser water pumps. Three old 125 TR cooling towers on the Substation terrace have reached the end of their life. INCOIS will replace them with one twin-cell cooling tower on a raised RCC platform behind the Substation building, and shift two of the condenser pumps to a pump room below the platform, so that they draw from the tower basin with a flooded suction. The existing 217 TR cooling tower stays in service. The old towers will be handed over to the successful bidder under buy-back.

1.3 The platform, the pump room, the stair, the trenches and the drain chamber are being built under a separate civil contract. This tender covers everything else.

2. Eligibility criteria

Only bidders who meet every one of the following criteria should respond. Documentary proof of each shall be uploaded with the technical bid.

2.1 The bidder shall be a company registered under the Companies Act, 2013 (or the Indian Companies Act, 1956), or a firm registered under any applicable Indian law (partnership, LLP or proprietorship), with PAN and GST registration.

2.2 The bidder shall give an escalation matrix with full contact details, for the resolution of issues during execution and the warranty period.

2.3 Average annual financial turnover of not less than Rs. 21.00 Lakh during the last three financial years ending 31 March 2026 (or ending 31 March 2025, where the audited accounts for 2025-26 are not yet available). A turnover certificate from a practising Chartered Accountant with UDIN, and the audited balance sheets for those years, shall be submitted.

2.4 The bidder shall have satisfactorily completed similar works during the last three (3) years ending on the day before the last date of bid submission, meeting any one of the following:

Sl.	Requirement	Value
(a)	One (1) similar work of value not less than	Rs. 33,60,000/- (Rupees thirty three lakh sixty thousand only)
(b)	Two (2) similar works, each of value not less than	Rs. 21,00,000/- (Rupees twenty one lakh only)
(c)	Three (3) similar works, each of value not less than	Rs. 16,80,000/- (Rupees sixteen lakh eighty thousand only)

2.5 "Similar work" means supply, installation, testing and commissioning of a cooling tower, or of the condenser water system of a water-cooled chiller plant that included a cooling tower with condenser water piping and valves, for a Government department, PSU, autonomous body, educational or research institution, hospital, data centre, or industrial or commercial establishment. Supply-only orders and works in progress will not be counted. Completion certificates from the client, quoting the order number, date, scope, value and date of completion, and signed with the name, designation and contact details of the signatory, shall be uploaded with copies of the orders.

2.6 **OEM authorisation.** Where the bidder is not the manufacturer of the cooling tower, a Manufacturer's Authorisation Form from the cooling tower OEM, addressed to INCOIS for this bid (Annexure-II), shall be uploaded. It shall confirm OEM supervision of erection and commissioning, OEM support during the warranty, and availability of spares for at least ten (10) years.

2.7 **CTI certification.** The offered cooling tower model line shall be listed in the Cooling Technology Institute (CTI) certification directory under CTI STD-201 on the date of bid submission. The CTI validation number and a copy of the directory entry shall be uploaded.

2.8 **Service set-up in Hyderabad.** An office, branch or service establishment of the bidder or of the cooling tower OEM in Hyderabad, to meet the response times of Clause 5.6. Proof: GST registration with the Hyderabad address and any one of lease agreement, property tax receipt, Shops and Establishments registration or electricity bill. A bidder without such an office shall give a written undertaking to set up a local service centre within 30 days of the contract.

2.9 Earnest Money Deposit (EMD) as per Section 8, Point 6.

2.10 **Start-ups.** To promote Make in India and start-ups, the prior turnover and experience criteria are relaxed for start-ups recognised by the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry, subject to their meeting the quality, technical specifications and other tender conditions. The DPIIT recognition certificate shall be uploaded.

2.11 **Site visit.** Site Visit Certificate (Annexure-VI), signed by the INCOIS representative. Bids without it will be rejected. No claim on account of a site condition that could have been seen at the visit will be entertained.

2.12 Eligibility Declarations (Annexure-V) and Self Declaration (Annexure-I).

3. Scope of work

3.1 The work is a complete job with single-point responsibility, to be executed as per the INCOIS scheme (drawing INCOIS/ENGG/CT/2026-04 and the schedules at Annexure-IX). The contractor shall provide all materials, labour, tools, cranes and lifting tackle, scaffolding, test instruments, consumables, shop drawings and OEM supervision needed to complete the work and hand it over in working order. The scope, priced item by item in the Bill of Quantities (Section 7, Table-2), includes:

a) Joint survey with INCOIS within 7 days of the contract, to fix the tower position on the deck, the pump positions, the pipe and cable routes, the tie-in points TI-1 and TI-2, the locations of MOV-03 and of panel CP-01, the make-up tap point, the drain point and the cut points of the old towers. The record shall be signed by both sides.

b) Shop drawings and submissions for approval (Clause 4.4).

c) One CTI-certified twin-cell FRP cooling tower, erected under OEM supervision (Clause 4.5). [BoQ item 1]

d) Hot-dip galvanised steel grillage for the tower, fixed to the RCC deck (Clause 4.6). [BoQ item 2]

e) Piping package: the complete condenser water piping on drawing INCOIS/ENGG/CT/2026-04 sheet 1, including the tie-ins with the existing headers in the AC plant room, made in shutdowns approved by INCOIS (Clause 4.7). [BoQ item 3]

f) Valves and pipe specialties package: every valve and specialty in the valve schedule, including three motorised valves, two balancing valves and the gear-operated butterfly valves (Clause 4.8). [BoQ item 4]

g) Instruments: temperature and pressure gauges, temperature transmitters, wet-bulb sensor and make-up water meter (Clause 4.9). [BoQ items 5 to 9]

h) Shifting of two existing condenser pumps from the AC plant room to the new pump room (Clause 4.10). [BoQ item 10]

i) Control panel CP-01, with modification of the outgoing feeder in the existing LT panel (Clause 4.11). [BoQ item 11]

j) Power and control cables and earthing (Clause 4.12). [BoQ items 12 to 17]

k) Dismantling and removal of the three old towers under buy-back, after acceptance of the new tower (Clause 5.1). [BoQ item 18]

l) Testing, commissioning, performance check, 72-hour trial run, handover and training (Section 5).

m) Any other item needed to complete the work (Clause 3.4). [BoQ item 19]

n) Comprehensive on-site warranty for 03 years: year 1 within items 1 to 19, years 2 and 3 under item 20 (Clause 5.6). [BoQ item 20]

3.2 **Items found during detailing.** Any minor item found necessary in the shop drawings over and above the schematic (for example an extra valve, vent, drain, support or fitting) shall be shown separately in the shop drawings and, once approved, installed within the package price. A change to the scheme ordered by INCOIS is a variation.

3.3 **Works by INCOIS and others (not in this tender):**

Work	By	Interface with this contract
RCC raised platform with finished deck, pump room with doors and louvres, floor drain, access stair, cable and pipe trenches, sleeves shown on the civil drawing, drain chamber near the platform	Separate civil contract	Handed over to the contractor in writing (the "front"). See Section 6.
Lighting and ventilation of the pump room; lifting hook or beam over the pumps	Separate civil contract	Fed from spare MCBs in CP-01.
Spare way in the existing LT panel; make-up water tap point within about 50 m of the platform	INCOIS	Feeder modified under item 11; tap point nominated at the joint survey.
Shutdown windows for pump shifting and tie-ins	INCOIS	Approved in writing, normally on Sundays or holidays.
Water treatment chemicals and dosing	INCOIS O&M agency	Two valved dosing tappings under items 3 and 4.
BMS software and integration	Others	Contractor gives the interface, the register map and support for joint testing.
Electricity and water for construction	INCOIS	Free of cost at one point each.
Any work on the existing chillers and on the existing 217 TR cooling tower	Not in scope	Except MOV-03 and the tie-ins.

3.4 **Item 19** is a lump sum quoted by the bidder for any item, material or work not listed in items 1 to 18 and 20 but needed to complete the work and hand over the system in working order, together with contingencies and site-related works: for example additional supports, sleeves and fasteners, minor electrical accessories, re-routing around existing services, scaffolding and access, protection of existing equipment and removal of debris. The bidder shall assess these at the site visit. No claim for an extra item will be entertained on this account.

3.5 **Rates.** Every rate quoted is for the item complete in all respects, including transport to site, unloading, storage, lifting, installation, all accessories, testing, commissioning, removal of debris and the first year of the comprehensive warranty. Years 2 and 3 are priced under item 20.

4. Basis of the scheme, technical specifications and suggested makes

The data below are the basis of the INCOIS scheme and of the selection of the tower. Approximate figures will be confirmed at the joint survey; bidders shall check them at the site visit.

4.1 Site and existing plant

Parameter	Value
Location	INCOIS campus, Pragathi Nagar, Hyderabad. Raised RCC platform behind the Substation building, deck about 7.0 m above ground tentatively, contractor to finalize as per the pump and piping layout, with a brick-walled pump room below the deck. Deck level and plan size as per the INCOIS civil drawing, shown at the site visit.
Climate	Design ambient wet bulb 27.2 °C; dry bulb up to 45 °C; relative humidity up to 95% (monsoon).
Wind and seismic	Basic wind speed 44 m/s (IS 875 Part 3); seismic Zone II (IS 1893 Part 1).
AC plant room	In the Substation building, about 5 m above the ground behind the building. Existing condenser water supply and return headers; four chillers (3 × 100 TR and 1 × 217 TR).
Existing condenser pumps	Four Nos. Wilo NL 125/315 (suction DN 150, discharge DN 125), 208.5 m^3/h at 28 m, 22 kW (30 HP), 1460 rpm, 415 V. Two, identified by INCOIS at the joint survey, are shifted under item 10. The other two stay with the existing 217 TR tower circuit.
Existing 217 TR cooling tower	On the Substation terrace. Stays in service. MOV-03 is provided for its isolation and changeover, at the location fixed at the joint survey.
Old towers for buy-back	Three Nos. 125 TR towers on the Substation terrace, on MS frames over RC pedestals (Annexure-VII).
Power supply	415 V, 3-phase, 4-wire, 50 Hz, from the existing LT panel in the Substation, about 100 m cable route to CP-01.

4.2 Duty and hydraulic rules

Item	Requirement
Tower duty (both cells)	960 USGPM (218 m^3/h), 480 USGPM per cell; hot water 35.0 °C, cold water 30.0 °C at 27.2 °C ambient wet bulb; heat rejection not less than 10,90,080 kcal/h.
Pumps	The two shifted pumps work as duty and standby with star-delta starters. Flooded suction from the tower basin: the basin low water level shall be at least 1.0 m above the pump suction centreline, and the pumps shall never work on a suction lift. The contractor shall check the pump head at 960 USGPM for the actual route.
Flow setting	Total flow and the split between the cells are set at commissioning with balancing valves BAL-01 and BAL-02. Isolation valves are kept fully open or fully closed and are never used to throttle.
Motorised valves	MOV-01 and MOV-02 (on/off) on the cell inlets of the new tower. MOV-03 for isolation and changeover of the existing 217 TR tower circuit.
Suction sides	The suction sides of the new tower and the existing 217 TR tower shall never be interconnected. The terrace basin is higher and would drain into the new basin and overflow it.
Pipe velocity	1.0 to 2.4 m/s in pressure lines; not more than 1.5 m/s in pump suction lines. Overflow and drain lines not smaller than the tower nozzles.
Nozzle loads	No pipe load on the tower or pump nozzles: independent supports, and flexible connectors with control rods.

4.3 Control philosophy (to be programmed in CP-01)

(a) Fans in AUTO (VFD): the PLC holds the tower outlet temperature (TT-2) at a set point equal to the wet bulb plus an adjustable approach (start at 2.8 °C), never below the minimum condenser water temperature of the chiller makers. Both fans run at the same speed. Minimum and maximum speed and ramp times are adjustable.

(b) Fans in BYPASS (DOL): manual, for VFD failure only. Changeover only at standstill, with the VFD and bypass contactors interlocked mechanically and electrically.

(c) Pumps: duty and standby with star-delta start. The standby pump starts on trip of the duty pump. Duty rotates weekly.

(d) A pump may start only when at least one cell inlet valve (MOV-01 or MOV-02) is proven open. A running pump blocks closing of the last open MOV.

(e) A cell taken out of service: its MOV closes and its fan stops.

(f) MOV-03: open and close from the panel or the BMS, as per the approved operating sequence for the existing 217 TR tower circuit, with position feedback.

(g) Each emergency stop or local isolator stops its machine and overrides every mode. A BMS command is a run permit only; local AUTO logic has priority.

(h) BMS points: run, trip, mode, fan speed, kW and kWh (incomer and VFDs), wet bulb, TT-1, TT-2, MOV positions and alarms.

(i) After a power failure, the duty pump restarts first and then the fans, with adjustable time delays. No restart while any emergency stop is active.

4.4 Shop drawings and submissions (within 3 weeks of the contract)

(i) Tower selection sheet from the CTI-certified line at the duty point, performance curves, GA drawing with dry and operating weights, point loads, nozzle sizes and anchor details.

(ii) Grillage shop drawings as per the support arrangement and point loads of the tower OEM, with a stability check signed by a qualified structural engineer, and the anchor positions checked against the deck reinforcement with INCOIS's structural consultant.

(iii) Piping shop drawings and isometrics with sizes, supports, sleeves, vents, drains and tie-in details, and a pump head check at 960 USGPM for the actual route.

(iv) Valve schedule with makes and models, and the bills of materials (Annexure IX-A and IX-B) without rates.

(v) Panel GA, single line diagram, wiring and control schematics, cable schedule, earthing layout, the control logic as per Clause 4.3 and the BMS register map.

(vi) Method statements with a shutdown plan for lifting of the tower parts, pump shifting, tie-ins and dismantling of the old towers.

(vii) Quality assurance plan with test formats.

INCOIS will approve or comment within one week. No work needing a submission shall start before its approval. Approval does not relieve the contractor of his responsibility for performance and completeness.

4.5 Cooling tower (1 No.) [BoQ item 1]

The values below are the minimum required. Any make whose offered model line is certified under CTI STD-201 and which meets these values is acceptable. The bidder shall state the value offered against each particular in the GTP (Annexure-VIII), backed by the OEM datasheet of the exact model. An entry of "complied" without the value will be treated as non-responsive.

Clause	Parameter	Requirement
4.5.1	Type	Induced-draft, counterflow, open-circuit FRP cooling tower with two cells, for outdoor installation on the raised platform.
4.5.2	Certification	Thermal performance certified under CTI STD-201 RS. The offered model line shall be listed in the CTI certification directory and the selection shall be from that line.
4.5.3	Duty	As per Clause 4.2: 960 USGPM, 35.0 °C to 30.0 °C at 27.2 °C wet bulb, not less than 10,90,080 kcal/h.
4.5.4	Cells and basins	Separate basins, or one basin with a partition, so that either cell can be isolated, drained and cleaned while the other runs. Equalizer between the basins with isolation valve V-09, sized by the OEM.
4.5.5	Casing, fan cylinder, basin	FRP with UV-stabilised gel coat. Casing, fan cylinder and fan deck in fire-retardant (FR) grade resin, with the OEM's flame-spread test certificate. Basin with sump, outlet with anti-vortex screen, drain, overflow and make-up connections, and freeboard enough to hold the water that drains back on pump stop without overflowing (OEM to confirm). Access door to each cell.
4.5.6	Fill	Film type, virgin PVC, UV-stabilised, low-fouling flute design, formed sheet not less than 0.2 mm thick, in modules removable for cleaning. Bidder to state the water quality limits for the fill offered.

Clause	Parameter	Requirement
4.5.7	Drift eliminators	PVC, multi-pass. Drift loss not more than 0.005% of the circulating flow.
4.5.8	Water distribution	Spray system with non-clog PP or ABS nozzles, removable for cleaning; flanged hot water inlet for each cell. Bidder to state the pumping head needed at the tower inlet.
4.5.9	Fans	Axial, FRP or aluminium alloy blades, adjustable pitch, one per cell, balanced to grade G 6.3 (ISO 21940-11) or better. Guard at the discharge.
4.5.10	Fan drive	Gear reducer, belt or direct drive, as per the certified design. A gear reducer shall have a service factor of not less than 2.0 on the motor rating, an oil sight glass, and oil fill and drain lines brought outside the fan cylinder.
4.5.11	Fan motors	3-phase, 415 V ± 10%, 50 Hz, TEFC squirrel cage, efficiency class IE3 (IS 12615), IP55, Class F, inverter-grade insulation for VFD duty, suitable for outdoor wet service.
4.5.12	Access and safety	Caged ladder from the deck to the fan deck; handrail and toe guard around the fan deck; anti-slip walkway. Steel parts hot-dip galvanised to IS 4759, or FRP. Fasteners in wet areas SS 304.
4.5.13	Wind and seismic	Tower, fixings and anchors designed for wind load to IS 875 (Part 3) at 44 m/s and seismic load to IS 1893 (Part 1), Zone II.
4.5.14	Sound	Sound pressure level, dB(A), at 1.5 m from the air inlet and at 15 m, to be stated.
4.5.15	Clearances	OEM's recommended clearances around the tower for rated performance, to be stated.
4.5.16	OEM supervision	OEM's authorised engineer to supervise erection and commissioning, sign the commissioning record and issue the commissioning certificate. Cost included in item 1.
4.5.17	Documents with the bid	CTI validation number and directory extract; selection sheet at the duty point; performance curves at 90, 100 and 110% flow; GA drawing with dry and operating weights and point loads; nozzle sizes; fan, motor and drive data; fill and eliminator data; sound data; FR resin certificate.

4.6 Steel support grillage [BoQ item 2]

The civil contract hands over a plain finished deck. The grillage shall follow the support arrangement and point loads of the tower OEM, because the make of the tower is known only after award.

Clause	Parameter	Requirement
4.6.1	Shop drawings	As per the OEM support arrangement, checked to IS 800 by a qualified structural engineer for the OEM operating point loads, wind load (IS 875 Part 3) and seismic load (IS 1893 Part 1). Deflection within the OEM's levelling tolerance. Shop drawings and the check approved before fabrication.
4.6.2	Material	Structural steel IS 2062 E250, with mill test certificates.
4.6.3	Corrosion protection	Hot-dip galvanised after fabrication to IS 4759, zinc coating not less than 610 g/m². No welding after galvanising. Site joints bolted with hot-dip galvanised bolts of property class 8.8. Damaged spots touched up with zinc-rich paint.
4.6.4	Fixing to the deck	Chemical anchors (or other anchors approved by INCOIS) at positions agreed with INCOIS's structural consultant, after scanning the deck for reinforcement. Non-shrink cementitious grout under the base plates. Bearing pads as per the OEM.
4.6.5	Measurement	Calculated weight of the members in the approved shop drawings, at standard sectional weights (IS 808). Nothing extra for bolts, wastage, zinc or holes.

4.7 Piping package [BoQ item 3]

(a) Item 3 is a lump sum for the complete condenser water piping on drawing INCOIS/ENGG/CT/2026-04 sheet 1: supply and return mains between the pump room and the AC plant room, tie-ins TI-1 and TI-2 with the existing headers, cell inlet branches, cell outlets, common suction header, pump suction and discharge branches, equalizer, overflow and drain lines to the drain chamber, blow-down, make-up line from the INCOIS tap point, vents, drains and dosing tappings.

(b) It includes all pipes, fittings, flanges, gaskets, fasteners, supports, sleeves not provided by the civil contract, outdoor coating, indoor painting, identification, hydro test, flushing and the two tie-ins.

(c) The lengths in the pipe run schedule (Annexure IX-B) are indicative, for assessment. Bidders shall check them at the site visit. Quantity differences arising from the contractor's routing and shop drawings are not variations.

(d) The bidder shall give the bill of materials for item 3 in the format at Annexure IX-B: with makes and quantities but without rates in the technical bid, and priced in the financial bid. Its total shall equal the price quoted for item 3.

Clause	Parameter	Requirement
4.7.1	Pipes	MS ERW to IS 3589 Fe 410 for 200 NB and above, wall not less than 6 mm; IS 1239 (Part 1) heavy class up to 150 NB. Make-up line GI heavy class, IS 1239 (Part 1). Mill test certificate for every lot.
4.7.2	Fittings and flanges	Long-radius bends (1.5 D), tees and concentric reducers; eccentric reducers, flat on top, at pump suction. Flanges PN16 to IS 6392. EPDM gaskets, 3 mm. Zinc-plated or galvanised high-tensile bolts.
4.7.3	Jointing	Welded joints for 65 NB and above, by qualified welders; flanged joints at equipment and valves; screwed joints up to 50 NB.
4.7.4	Sizes	As per the scheme (Annexure-IX), with the connections matched to the nozzles of the tower offered. Velocities as per Clause 4.2.
4.7.5	Supports	Independent supports, guides and anchors, so that no load reaches the tower or pump nozzles. Outdoor supports hot-dip galvanised. Clamps with EPDM lining. Spacing as per the CPWD General Specifications for HVAC Works, 2024, with extra supports at valves, strainers and bends.
4.7.6	Outdoor coating	Surface cleaned to St 3 (or Sa 2.5 where blasting is possible), epoxy primer, glass-fibre reinforced epoxy or polyester wrap of total thickness not less than 3 mm, UV-resistant polyurethane finish. Thickness records to be kept.
4.7.7	Indoor painting	Pipes in the pump room and the AC plant room: one coat epoxy zinc phosphate primer and two coats epoxy or synthetic enamel.
4.7.8	Identification	Colour bands and flow arrows to IS 2379. Tag plates on valves, matching the valve schedule.
4.7.9	Hydro test	1.5 times the maximum working pressure, not less than 10 bar, held for 4 hours without drop, with the tower and pumps isolated by blinds. Witnessed and recorded.
4.7.10	Flushing and cleaning	Flushing through temporary bypasses until clear water flows, then chemical cleaning and passivation with a product approved by INCOIS, before the tie-ins. Strainers cleaned afterwards; cleaning water disposed of as directed by INCOIS. Recorded.
4.7.11	Buried pipes	No MS pipe shall be buried directly in soil. Road and trench crossings through the sleeves or trench of the civil contract.

4.8 Valves and pipe specialties package [BoQ item 4]

(a) Item 4 is a lump sum for every valve and specialty in the valve schedule (Annexure IX-A) and any other valve needed on the approved shop drawings.

(b) Sizes are as per the schedule. Valves at the tower connections shall match the nozzles of the tower offered.

(c) The bidder shall list every tag with make and model in the format at Annexure IX-A: without rates in the technical bid, and priced in the financial bid. Its total shall equal the price quoted for item 4.

Clause	Parameter	Requirement
4.8.1	Butterfly valves	IS 13095, PN16. Body CI (IS 210, FG 260) or DI (IS 1865). Disc SS (CF8 or CF8M) or DI with nylon or epoxy coating. Replaceable EPDM seat. SS shaft. Lug type where the valve must hold pressure with the downstream side removed; wafer type elsewhere. Gear operator with handwheel and position indicator for 150 NB and above; lever with notched plate and lock for 125 NB and below. Hydro test certificate for body and seat.
4.8.2	Motorised butterfly valves (MOV-01 to MOV-03)	Valve as Clause 4.8.1, with an electric quarter-turn on/off actuator: 230 V single phase (415 V three phase acceptable), IP67, integral reversing starter, local/remote selector with local open and close push buttons, open and close limit switches and torque switches, manual override handwheel, motor thermal protection, potential-free contacts for open, closed and fault, local position indicator, operating time 30 to 60 seconds for 90 degrees.
4.8.3	Balancing valves (BAL-01, BAL-02)	PN16, flanged, CI or DI body, two pressure test points, presetting scale, memory stop and locking device, Kv chart. Selected so that the design cell flow is reached at not less than 50% opening.
4.8.4	Check valves (NRV-01, NRV-02)	Dual-plate, spring-loaded, non-slam, PN16, CI or DI body, SS plates and springs, EPDM seat.
4.8.5	Basket strainer (STR-01)	PN16, CI or fabricated MS body (epoxy coated inside), SS 316 basket with 3 mm perforations, open area not less than three times the pipe area, quick-opening cover, drain plug, gauge tappings on both sides.
4.8.6	Y-strainer (STR-02)	Bronze or CI body, SS screen with 1 mm perforations, on the make-up line.
4.8.7	Flexible connectors (FC-01 to FC-08)	EPDM rubber bellows, nylon-cord reinforced, PN16, rated for not less than 70 °C, with floating flanges, control rods and gusset plates. Units on the pump suction side and at the tower outlets vacuum rated, not less than 650 mm Hg.
4.8.8	Float valves (FV-01, FV-02)	Modulating type, bronze or brass body, SS or PP float. Outlet discharging at least 50 mm above the basin overflow level (air gap, NBC 2016 Part 9).
4.8.9	Ball valves	Full bore, forged brass or bronze, PN16, to IS 9890, lever operated.
4.8.10	Globe valve (BD-01)	Bronze, PN16, to IS 778, for setting the blow-down rate.
4.8.11	Automatic air vents (AAV-01, AAV-02)	DN 25, PN16, brass body, SS internals, float type, with isolation ball valve for servicing without draining. Fitted only at points that stay above atmospheric pressure in running; manual vents elsewhere.
4.8.12	Tagging and tests	Every valve tagged as per the valve schedule. Manufacturer's test certificates. Seat leakage check at site.

4.9 Instruments [BoQ items 5 to 9]

Clause	Parameter	Requirement
4.9.1	Temperature gauges (TG-1 to TG-4)	Bimetal dial, 100 mm, 0 to 60 °C, accuracy ± 1% of full scale, SS case IP65, every-angle or bottom connection, SS thermowell.
4.9.2	Pressure gauges (PG-1 to PG-4)	Bourdon, 100 mm dial, IS 3624, accuracy class 1.6 or better, SS case, glycerine filled. Range such that the normal reading is between 40 and 70% of full scale; compound range on pump suction. Gauge cock and snubber.
4.9.3	Temperature transmitters (TT-1, TT-2)	PT100 Class A, 3-wire, head-mounted 4 to 20 mA transmitter, range 0 to 50 °C, IP65, SS thermowell. Shielded cable to CP-01 included.

Clause	Parameter	Requirement
4.9.4	Wet-bulb sensor (WBT-01)	Temperature and RH transmitter (± 0.2 °C, ± 2% RH), 4 to 20 mA or Modbus, in a fan-aspirated radiation shield (a multi-plate naturally ventilated shield is acceptable). Mounted on the platform on the windward side, away from the tower discharge. Wet bulb computed in the PLC. Shielded cable to CP-01 included.
4.9.5	Make-up water meter (WM-01)	50 mm, Class B, ISI marked, to IS 779 (or IS 2373, bulk type), with totaliser and pulse output wired to CP-01. Strainer and isolation upstream; straight lengths as per the maker.

4.10 Shifting of two existing condenser pumps [BoQ item 10]

(a) Electrical isolation with lock-out and tag-out, draining, disconnection and dismantling of the two pumps with motors and base frames; careful lowering and transport to the pump room.

(b) New RCC plinths (M25) not less than 150 mm above the pump room floor, with anti-vibration pads or mounts, foundation bolts and grouting.

(c) Re-installation and levelling, and checking of the pump and motor shafts at the coupling with a dial gauge or laser tool: offset and gap within 0.05 mm, recorded before and after grouting and after the piping is connected.

(d) Reuse of the existing pump suction strainers (ES-1, ES-2) with new SS 304 screens; connection to the new piping through flexible connectors (item 4).

(e) Each pump opened in the presence of INCOIS. Replacement of worn bearings, mechanical seals or coupling elements, if needed, is paid as a variation (Section 8, Point 10).

(f) Insulation resistance test of each motor; check that each motor has six terminals for star-delta connection; termination of the new cables; test run with current, pressure and vibration readings.

(g) In the AC plant room: removal of the redundant pipe branches of the shifted pumps, capping with blind flanges, isolation of the old pump feeders at the source with "spare" labels, and making good of the floor.

4.11 Control panel CP-01 [BoQ item 11]

CP-01 shall be built as per drawing INCOIS/ENGG/CT/2026-04 sheet 2 and the table below. Electrical work shall be done by persons holding the licences and competency certificates required under the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023. The contractor may engage a licensed electrical contractor for this part.

Clause	Parameter	Requirement
4.11.1	Standard	IS/IEC 61439-1 and IS/IEC 61439-2. Design verification certificate for the panel type; routine tests at works.
4.11.2	Construction	Floor-standing, CRCA sheet steel 2 mm (frame) and 1.6 mm (doors and covers), powder coated. IP54 indoor, or IP55 with canopy if outdoor. Front access, bottom cable entry with gland plates, cable alley, lockable hinged doors, panel lamp, space heater with thermostat.
4.11.3	Busbar	Copper, TPN, rated not less than the incomer, braced for the fault level at the panel and not less than 25 kA for 1 second. Colour-coded sleeves, shrouded.
4.11.4	Incomer	125 A 4-pole MCCB, Icu not less than 25 kA with Ics equal to 100% of Icu, adjustable releases. Multifunction meter (V, A, kW, kWh, PF, Hz, THD) with Modbus RS-485. Phase-failure and phase-sequence relay. R-Y-B indication. Type 2 SPD (IEC 61643-11) with back-up protection and status contact.
4.11.5	Fan feeders (2)	MPCB or MCCB; VFD for variable torque duty, rated for the fan motor offered, with built-in DC choke or line reactor, EMC filter category C2 (IEC 61800-3) and Modbus; output contactor; DOL bypass contactor with thermal overload relay; VFD and bypass contactors interlocked mechanically and electrically; OFF-VFD-BYPASS selector; changeover only at standstill; run, trip, VFD-mode and bypass-mode lamps.

Clause	Parameter	Requirement
4.11.6	Pump feeders (2)	MCCB; automatic star-delta starter for 22 kW (30 HP): main, star and delta contactors (AC-3), adjustable timer, thermal overload relay, single phasing preventer; ammeter; AUTO-OFF-MANUAL selector; run and trip lamps; duty and standby changeover.
4.11.7	MOV feeders (3)	6 A 2-pole MCB each, open and close relays, open, closed and fault lamps, local and remote selection.
4.11.8	Auxiliary supply	Control transformer 415/230 V (or MCB-protected supply) with six 10 A single-pole MCBs: PLC and I/O; sensors; pump room lighting; pump room sockets; panel lamp and heater; spare.
4.11.9	Spare feeder	One 32 A TP MCCB, wired up to terminals.
4.11.10	Controller	PLC (or programmable controller) with analogue inputs for WBT-01, TT-1 and TT-2 and digital inputs and outputs for every feeder and MOV; door HMI or indication panel. Logic as per Clause 4.3. Program and parameter backup, with passwords, handed over.
4.11.11	BMS interface	Modbus RTU on RS-485 (BACnet or Modbus TCP acceptable), with register map. The BMS command acts as a run permit only.
4.11.12	Field devices	Emergency stop push-button station (IP65, stay-put, lockable) near each fan motor and each pump. Lockable local isolator (IP65) near each fan motor, with early-break auxiliary contact wired to the VFD. Local stop and lock-off station near each pump.
4.11.13	Existing LT feeder	Outgoing feeder in the existing LT panel changed to a 125 A TP MCCB with breaking capacity matching that panel, with terminations, under INCOIS permit with the feeder isolated.
4.11.14	Location	Outside the tower footprint, never below a water pipe, valve or basin. Fixed at the joint survey.

4.12 Cables and earthing [BoQ items 12 to 17]

Clause	Parameter	Requirement
4.12.1	Power cables	1.1 kV, copper conductor, XLPE insulated, armoured, FRLS outer sheath, IS 7098 (Part 1), ISI marked.
4.12.2	Control cables	1.1 kV, copper conductor, PVC insulated, armoured, FRLS, IS 1554 (Part 1), ISI marked, 1.5 sq mm.
4.12.3	Laying	On perforated hot-dip galvanised cable trays, or in the trench or ducts of the civil contract, clamped at intervals. Power and control cables segregated. Bending radius not less than 12 times the cable diameter. Double-compression brass glands, tinned copper crimped lugs, ferrules and cable tags at both ends and tags every 20 m. Trays, supports and clamps are included in the cable rates.
4.12.4	Measurement	Length actually laid, measured jointly along the route. No allowance for wastage.
4.12.5	Earthing (item 17)	As per IS 3043 and the CPWD General Specifications for Electrical Works, Parts I and II, 2023. Two earth electrodes with test pits. Panel body, each motor, the steel grillage, pipe work, MOV actuators and cable trays bonded. Two separate and distinct earth connections for the panel and for each motor. Resistance not more than 5 ohm for each electrode and not more than 1 ohm for the system (bonded with the Substation earth grid where INCOIS permits).

4.13 Suggested makes

The cooling tower may be of any make whose offered model line is listed under CTI STD-201 and which meets Clause 4.5 in full. For other materials, the makes below show the grade required. An equivalent may be offered with its datasheet, but not of a lower grade; equivalence will be decided by INCOIS. The list does not restrict competition.

Item	Suggested makes

Item	Suggested makes
Cooling tower (model line listed under CTI STD-201)	Paharpur · Advance Cooling Towers · Bell Cooling Tower · Delta Cooling Towers · Himgiri FRP Cooling Towers · SPX Marley · EVAPCO · BAC, or any other make whose offered line is in the CTI directory
Butterfly valves, check valves, strainers	L&T Valves (Audco) · Advance Valves · Intervalve · Kirloskar · Castle
Electric actuators for MOVs	Rotork · AUMA · Rotex · Bernard Controls
Balancing valves	Danfoss · IMI TA · Honeywell · Advance Valves
Flexible connectors	Resistoflex · Kanwal · Easyflex
Ball, globe and float valves; air vents	Zoloto · Leader · Sant · Caleffi (air vents)
MS and GI pipes	Tata · Jindal · APL Apollo · Surya · Welspun, to IS 1239 (Part 1) or IS 3589
Structural steel	SAIL · Tata · JSW · JSPL, to IS 2062
Chemical anchors	Hilti · Fischer · Würth
Gauges and temperature transmitters	H Guru · WIKA · Baumer · Endress+Hauser
Temperature and RH transmitter	Vaisala · Rotronic · E+E Elektronik · Siemens
Water meter	Kranti · Capstan · Itron · Zenner (ISI marked)
Variable frequency drives	ABB · Danfoss · Schneider Electric · Siemens
MCCB, MPCB, MCB, contactors, relays	Schneider Electric · ABB · Siemens · Lauritz Knudsen · Legrand
PLC	Siemens · Schneider Electric · ABB · Rockwell (Allen-Bradley) · Mitsubishi
Multifunction meter	Schneider Electric · Secure · Lauritz Knudsen · Socomec · Rishabh
Surge protective device	DEHN · Phoenix Contact · OBO Bettermann · CITEL · ABB
Power and control cables	Polycab · Havells · KEI · Finolex · RR Kabel (ISI marked)

5. Buy-back, testing, commissioning and warranty

5.1 Removal and buy-back of the old cooling towers [BoQ item 18]

a) Scope of Buy-Back (As-Is-Where-Is): Three old 125 TR cooling towers and their listed accessories are offered for buy-back on an "as is where is" basis with no warranty from INCOIS,

b) Bidders must quote a single consolidated buy-back value excluding GST, alongside a per-tower breakdown, as a separate field that cannot be deducted from any standard BoQ item line.

c) INCOIS reserves the right to Exercise/Not Exercise Buy Back Option. However, the bidders must quote separately as per Annexure VII-B and to be uploaded under financial document only, in which case the contractor must still dismantle and stack the towers under BoQ Item 18 at no extra cost.

d) Bidders should note that Buyback value will not be part in deciding L1.

e) The old cooling towers must remain fully operational until the new tower passes its 72-hour continuous trial run and is formally accepted in writing.

f) Dismantling must be done using an approved crane lifting plan without damaging RC pedestals, while ensuring waterproofing restoration, pipe blanking, and complete removal and labelling of old fan feeder cabling.

g) All hazardous lubricants must be drained into leak-proof containers and handed over to a TGPCB-authorized recycler, with mandatory submission of disposal manifests to INCOIS.

h) Financial Adjustment: The buy-back transaction will be processed via recovery against works contract payments as a credit deduction in the contractor's tax invoice, or it will be unilaterally recovered by INCOIS from the Second Milestone Payment.

i) All buy-back scrap must be cleared from the campus within seven days of handover using a valid material gate pass to avoid storage charges.

5.2 Inspection at works and at site

INCOIS may inspect the tower components at the OEM's works (fill, eliminators, fan balancing records, motor and gear reducer test certificates) and witness the factory test of CP-01 (routine tests to IS/IEC 61439 and functional tests of the logic and interlocks). The contractor shall give 10 days' notice of readiness. Travel of INCOIS officers is borne by INCOIS; testing charges by the contractor. Every consignment shall be jointly

inspected at site against the approved submissions, with a signed record. Any non-conforming item shall be replaced at no extra cost, and a test that fails for reasons attributable to the contractor shall be repeated at

5.3 Site tests

- Hydro test, flushing and chemical cleaning of the piping as per Clauses 4.7.9 and 4.7.10.
- Before energising: insulation resistance of every cable and motor; earth continuity and earth resistance; phase sequence; tightness of terminations.
- Functional tests of CP-01: every interlock and mode, emergency stops and local isolators, VFD and bypass changeover, star-delta timing, MOV operation, operating time and feedback, duty and standby changeover of the pumps, restart after power failure, and read-out of every BMS point.

5.4 Commissioning and performance check

Commissioning by the OEM's authorised engineer, recording: fan blade pitch and motor current; fan vibration; gear reducer oil level (if used); water distribution over the fill with no dry patches; the cell flow split set within ± 5% with BAL-01 and BAL-02, with settings locked and recorded on a card fixed at the panel; total flow measured with an ultrasonic clamp-on flow meter (contractor's instrument with calibration certificate); pump suction and discharge pressures and currents; float valve setting, overflow and drain check; blow-down setting.

Performance check: with the plant running on the load available, readings of flow, hot and cold water temperatures, wet bulb (by an aspirated psychrometer) and fan power every 15 minutes for 4 hours. The measured cold water temperature shall not exceed the value read from the OEM's certified performance curves, for the measured flow, range and wet bulb, by more than 0.5 °C. If it does, the contractor shall rectify and repeat the check at his cost.

5.5 Trial run, acceptance and handover

Continuous trial run of 72 hours, with temperatures, pressures, currents and fan speed logged every two hours, without any trip attributable to the contractor. On its successful completion, the Engineer-in-Charge will issue the acceptance certificate. The warranty starts from this date.

Handover (no separate payment): commissioning report signed by the OEM engineer; all test records; as-built drawings of piping, panel and cable routes; O&M manuals (two hard copies and a soft copy); VFD and PLC parameter and program backup with passwords; spares list with part numbers; warranty certificate; two days of on-site training of INCOIS operation and maintenance staff.

Mandatory spares (included in the contract price): spray nozzles, 10% of the number installed and not less than four. No other spares are required; the recommended spares list with prices, handed over at completion, is for purchase by INCOIS after the warranty.

5.6 Comprehensive warranty (3 years) [BoQ item 20 for years 2 and 3]

Three (3) years comprehensive on-site warranty from the date of acceptance, covering the cooling tower, steel grillage, piping, valves, instruments, panel, cables and earthing, with all parts, consumables and labour, except as stated below for the fill and the spray nozzles. For the two shifted pumps, the warranty covers the contractor's workmanship (plinths, shaft setting, connections and cabling). Year 1 is included in the rates of items 1 to 19. Years 2 and 3 are priced under item 20 as a rate per year and paid at the end of each year. During the warranty:

- Complaints shall be acknowledged within 24 hours and attended at site within 48 hours. A defect that stops the tower, a pump or the panel shall be rectified within 72 hours; any other defect within 7 days.
- Two preventive maintenance visits in each year (six in all), covering fans, drives and oil, cleaning of the spray nozzles, float valves, panel terminations, VFD parameters and MOV operation, each with a service report signed by the Engineer-in-Charge.
- **Fill and spray nozzles:** their replacement is not covered where the cause is scaling, fouling, biological growth or chemical attack from the circulating water, since their condition depends on the water quality, which INCOIS controls through its water treatment agency. Defects of material or workmanship remain covered: sagging, collapse or deformation of the fill within the rated water temperature, UV damage, and cracked or broken nozzles. Each service report shall record the condition of the fill and the nozzles, with photographs.
- Parts shall be replaced with genuine OEM parts only.
- **Recoveries:** Rs. 2,000 per day of delay beyond the rectification time above, and Rs. 5,000 for each missed preventive maintenance visit, recovered from the item 20 payments, the retention or the performance security.
- If a complaint is not attended within the time above, INCOIS may get the work done through another agency at the contractor's risk and cost, recoverable from any amount due or from the performance security.

- Joint inspections will be held at the end of year 1, before the 10% retention is released, and in the last month of year 3, before the last item 20 payment. All defects found shall be set right first.

6. Site conditions, safety and programme

(a) The AC plant serves laboratories and the data centre round the clock. Pump shifting and tie-ins shall be done only in shutdown windows approved in writing by the Engineer-in-Charge, normally on Sundays or holidays, each not longer than 12 hours, planned at least 7 days ahead with a written method statement. All spools shall be prefabricated and all materials kept at site before a shutdown starts. No extra payment for work outside office hours.

(b) Sequence: erect the grillage, tower, piping and panel while the existing plant runs; shift the two pumps and connect them; make the tie-ins TI-1 and TI-2; test and commission; complete the performance check, trial run and acceptance; only then stop and dismantle the old towers.

(c) Crane lifting with a lifting plan, tested tackle with certificates, a licensed operator and barricading. No load shall pass over live HT or LT equipment.

(d) Hot work near the Substation, and any hot work on or near FRP parts, only under a written permit from INCOIS, with fire extinguishers and a fire watch at the spot.

(e) Work at height with full-body safety belts, lifelines and guardrails on the terrace and on the tower deck.

(f) Lock-out and tag-out for every electrical isolation. Work on the existing LT panel only under INCOIS permit, with the feeder isolated.

(g) All personnel shall be cleared by INCOIS Security and carry photo identity cards. PPE is mandatory. Debris shall be removed daily. Any damage to roads, trenches, cables or buildings shall be made good by the contractor.

Programme (from the date of the GeM contract)

Stage	Activity	Duration	Target
1	Joint survey; shop drawings and submissions (Clause 4.4)	3 weeks	Week 3
2	Approval of submissions by INCOIS	1 week	Week 4
3	Manufacture and delivery of tower, panel, valves, pipes and cables; receipt inspection	6 weeks	Week 10
4	Erection of grillage, tower, piping, panel and cabling (needs the front)	3 weeks	Week 13
5	Pump shifting, tie-ins, testing, commissioning and performance check	2 weeks	Week 15
6	72-hour trial run, acceptance, dismantling of the old towers, handover and training	1 week	Week 16

Stages 4 to 6 need the platform and the pump room (the front) from the civil contract. If INCOIS hands over the front after the end of week 10, the 6 weeks for stages 4 to 6 count from the date of handing over, and the contractor shall store the delivered goods safely at site in the meantime at no extra cost.

7. Contents of the bid

7.1 The bid shall be submitted on GeM in two parts: (i) Technical bid and (ii) Financial bid.

7.2 **Technical bid:** the documents of Section 2; Table-1 and Table-2 below, filled in; Annexures I, II, V and VI; the GTP (Annexure-VIII) with the documents of Clause 4.5.17; and the bills of materials for items 3 and 4 (Annexure IX-A and IX-B) with makes and quantities, **without rates**. No price shall appear anywhere in the technical bid.

7.3 **Financial bid:** prices for all 20 items on GeM, giving for each item the rate excluding GST, the GST rate and the amount. One PDF in the financial document (price break-up) column on GeM, with the **priced** bills of materials for items 3 and 4 (Annexure IX-A and IX-B) and the buy-back Breakup price form (Annexure VII-B). The total of each priced bill shall equal the price quoted on GeM for that item; if they differ, the GeM price prevails and the unit rates of the bill are adjusted in proportion.

7.4 **Evaluation:** technical bids are evaluated on pass or fail. L1 is decided on the total value of items 1 to 20 quoted on GeM. The buy-back value is not part of this total (Clause 5.1).

NOTE:

- The documentary proof attached shall be legible and relevant.
- Offers without (i) copies of the relevant orders, (ii) client certificates with the signature, date and contact details of the client-side signatory, (iii) the filled-in Table-1 and GTP, or (iv) the filled-in un-priced bid (Table-2) will not be considered for further evaluation.
- Part, conditional or incomplete quotations will not be accepted.

Table-1: Technical compliance statement

S No	Description	Compliance status Yes / No	Page no. of the proof attached	Remarks / deviations, if any
1.	Name of the bidder			
2.	The bidder is: 1) company registered under the Companies Act 2) partnership / LLP 3) proprietorship 4) OEM 5) system integrator 6) others			
3.	Bidder address and contact details (e-mail, phone)			
4.	MSE / Udyam registration, if any; GST registration no.; PAN			
5.	Bank details of the firm			
6.	Single point of contact: name, e-mail, phone			
7.	Registration, PAN and GST proofs (Clause 2.1)			
8.	Escalation matrix (Clause 2.2)			
9.	Average annual turnover not less than Rs. 21.00 lakh, with CA certificate (UDIN) and audited balance sheets (Clause 2.3)			
10.	Similar works, with client completion certificates and copies of the orders (Clauses 2.4 and 2.5)			
11.	Manufacturer's authorisation from the cooling tower OEM (Clause 2.6, Annexure-II)			
12.	CTI STD-201 directory listing and validation number of the offered line (Clause 2.7)			
13.	Service set-up in Hyderabad, or undertaking (Clause 2.8)			
14.	EMD, or exemption certificate (Clause 2.9)			
15.	Start-up recognition, if claimed (Clause 2.10)			
16.	Site Visit Certificate (Clause 2.11, Annexure-VI)			
17.	Eligibility Declarations (Annexure-V) and Self Declaration (Annexure-I)			
18.	GTP filled with the values offered (Annexure-VIII), with OEM datasheets, selection sheet and GA drawing (Clause 4.5.17)			
19.	Bills of materials for items 3 and 4 with makes and quantities, without rates (Annexure IX-A and IX-B)			
20.	Certificate regarding the land border clause (Section 8, Point 21)			
21.	Acceptance of Buy Back Clause as per (Section 5, Point 5.1)			

Table-2: Un-priced bid

Bidders shall quote for all items. Mark Yes or No only; do not show prices here.

Item	Description	Unit	Qty	Quoted (Yes/No)

Item	Description	Unit	Qty	Quoted (Yes/No)
PART A: COOLING TOWER AND SUPPORT STEEL				
1	Supply, installation, testing and commissioning of one (1) twin-cell, induced-draft, counter flow FRP cooling tower from a CTI STD-201 certified model line, 960 USGPM (218 m^3/h), 35.0 °C to 30.0 °C at 27.2 °C wet bulb, heat rejection not less than 10,90,080 kcal/h, with fans, IE3 VFD-duty motors, drives and all accessories, OEM-supervised erection and commissioning and mandatory spares, as per Clauses 4.5 and 5.5. (buy-back value quoted separately in Annexure VII-B, not deducted here).	No	1	
2	Structural steel grillage (IS 2062) for the cooling tower, hot-dip galvanised (IS 4759), as per the OEM support arrangement, fixed to the RCC deck with chemical anchors, as per Clause 4.6. Paid on the calculated weight of the approved shop drawings.	kg	4000	
PART B: PIPING AND VALVES (LUMP SUM)				
3	Condenser water piping package, lump sum, complete as per drawing INCOIS/ENGG/CT/2026-04 sheet 1, Clause 4.7 and Annexure IX-B, including tie-ins TI-1 and TI-2, supports, coating, painting, hydro test, flushing and cleaning.	LS	1	
4	Valves and pipe specialties package, lump sum, complete as per the valve schedule in Annexure IX-A and Clause 4.8, including three motorised butterfly valves (two on the new tower cells and one on the existing 217 TR tower circuit) and two balancing valves.	LS	1	
PART C: INSTRUMENTS				
5	Bimetal dial thermometer, 100 mm, 0 to 60 °C, with SS thermowell (TG-1 to TG-4), as per Clause 4.9.	No	4	
6	Pressure gauge, 100 mm, with gauge cock and snubber (PG-1 to PG-4), as per Clause 4.9.	No	4	
7	PT100 temperature transmitter, 4 to 20 mA, with SS thermowell and shielded cable to CP-01 (TT-1, TT-2), as per Clause 4.9.	No	2	
8	Wet-bulb sensor assembly (temperature and RH transmitter in a radiation shield) with shielded cable to CP-01 (WBT-01), as per Clause 4.9.	Set	1	
9	Make-up water meter, 50 mm, Class B, with pulse output wired to CP-01 (WM-01), as per Clause 4.9.	Set	1	
PART D: SHIFTING OF EXISTING PUMPS				
10	Shifting of two (2) existing condenser pumps (Wilo NL 125/315, 22 kW) from the AC plant room to the new pump room, with new RCC plinths, anti-vibration pads, shaft setting, reconnection, new strainer screens and test run, as per Clause 4.10.	LS	1	
PART E: ELECTRICAL AND CONTROLS				
11	Control panel CP-01 complete as per drawing INCOIS/ENGG/CT/2026-04 sheet 2 and Clause 4.11 (fan VFDs with DOL bypass, pump star-delta starters, MOV feeders, PLC, BMS interface, field stations), including modification of the outgoing feeder in the existing LT panel to a 125 A TP MCCB.	LS	1	
12	4C × 35 sq mm copper XLPE armoured cable (IS 7098 Part 1), existing LT panel to CP-01, laid and terminated as per Clause 4.12.	m	100	
13	As item 12, but 3C × 10 sq mm, CP-01 to the pump motors (two runs per pump, star-delta).	m	60	
14	As item 12, but 4C × 6 sq mm, CP-01 to the fan motors.	m	60	

Item	Description	Unit	Qty	Quoted (Yes/No)
15	3C × 1.5 sq mm copper armoured FRLS control cable (IS 1554 Part 1), laid and terminated as per Clause 4.12.	m	100	
16	As item 15, but 8C × 1.5 sq mm.	m	100	
17	Earthing set: two earth electrodes with test pits, GI strip and bonding, with two separate earth connections for the panel and for each motor, as per Clause 4.12.	Set	1	
PART F: DISMANTLING AND MISCELLANEOUS				
18	Dismantling of the three (3) old 125 TR cooling towers on the Substation terrace, with frames, local piping and old fan feeders; lowering by crane, capping, making good of the terrace and removal from the campus, after acceptance of the new tower, as per Clause 5.1.	LS	1	
19	Any other item required for satisfactory completion of the work, not specifically listed in items 1 to 18 and 20, as per Clause 3.4. Lump sum.	LS	1	
PART G: COMPREHENSIVE WARRANTY				
20	Comprehensive on-site warranty for 2 and 3 Years for the complete installation under items 1 to 18, with all spares, consumables and labour and two preventive maintenance visits per year, as per Clause 5.6 (replacement of fill and nozzles due to water quality excluded). The Price Breakup for each year should be provided in Financial Document along with price bid	Year	2	

Note: Items 2 and 12 to 16 are paid on joint measurement at the quoted rates. Items 3, 4, 10, 11, 18 and 19 are lump sum. Item 20 is quoted as a rate per year. The priced bills of materials (Annexure IX-A and IX-B) and the buy-back price form (Annexure VII-B) go only in the financial document column on GeM.

8. General terms and conditions

Point No.	Details
1.	**Acceptance of the order:** The successful bidder shall formally accept the contract within 10 days of its issue. If the acceptance is not received within 10 days, the contract shall be deemed accepted and binding on the successful bidder.
2.	**Validity period:** Bids shall be valid for 90 days from the bid closing date.
3.	**Completion period:** 16 weeks from the date of the GeM contract, as per the programme in Section 6. If INCOIS hands over the front after the end of week 10, the 6 weeks for stages 4 to 6 count from the date of handing over. Requests for extension of time, with reasons, shall be made within 7 days of the event causing the delay.
4.	**Warranty period:** 3 years comprehensive on-site warranty from the date of acceptance, as per Clause 5.6: year 1 within items 1 to 19, years 2 and 3 under item 20.
5.	**Payment terms:** **(a)** Milestone 1: After Supply (70% Payment) 70% of the contract value for items 1 to 19 will be released within 30 days of the physical delivery of all materials at the INCOIS campus, Hyderabad. For items paid on joint measurement (Items 2 and 12 to 16), this 70% progress payment will be calculated based on actual quantities delivered to the site. Payment will be processed against the submission of the following documents: a) Joint Receipt Inspection Report (JRIR) signed by both INCOIS and the contractor. b) Original Manufacturer (OEM) test certificates for major equipment (cooling tower components, motors, VFDs). c. Factory Test Report for the control panel CP-01. d. d) Original ink-signed tax invoice. e. e) Proof of valid Transit, Storage, and Erection All-Risk Insurance policies. **(b)** Milestone 2: Final Payment After Installation, Commissioning & Handover (30% Payment minus Buy-Back) The balance 30% of the contract value for items 1 to 19 will be released within 30 days of the satisfactory completion of the entire scope of work, including successful installation, testing,

Point No.	Details
	commissioning, performance check, 72-hour continuous trial run, and formal written acceptance by the Engineer-in-Charge. Quantity Adjustments: Final payment for measurement-based items (Items 2 and 12 to 16) and approved variations will be reconciled and adjusted based on final joint measurements in this bill. **Buy-Back:** If INCOIS exercises the buy-back option, the single consolidated buy-back value quoted by the contractor plus applicable GST must be shown as a clear, distinct credit deduction/discount item inside this final milestone tax invoice. If the contractor fails to incorporate this credit value, INCOIS shall unilaterally recover the entire buy-back amount plus applicable GST from the gross payable amount under this bill. The old towers shall only be dismantled and removed under BoQ Item 18 after the new system passes the 72-hour trial run and is accepted. **Prerequisite Documents:** Payment is subject to the submission of the Final Acceptance Certificate, all handover/as-built documentation (including PLC/VFD parameters, passwords, O&M manuals), and the submission of a valid Performance Security (e-PBG/Bank Guarantee) as per Point 7. **(c) Payout for Comprehensive On-Site Warranty (Item 20)** The quoted annual rate for the 2nd and 3rd years of the Comprehensive On-Site Warranty under BoQ Item 20 will be paid on an annual, deferred basis at the end of each respective warranty year. Payouts are strictly subject to the submission of satisfactory bi-annual preventive maintenance service reports signed by the Engineer-in-Charge and the deduction of recoveries, if any, for delayed rectifications as per Clause 5.6. The 1st year of the warranty is built into the capital costs of items 1 to 19 and carries no separate payout.
6.	**Earnest Money Deposit (EMD):** Bid Security (BS) Rs.84,000/- (Rupees Eighty four thousand only) has to be submitted as per the following form/ options: 1. Demand Draft 2. Insurance Security Bond 3. e-Bank Guarantee 4. Fixed Deposit in favour of Director, INCOIS payable at Hyderabad with validity for a period of 45 days beyond the tender validity period. 5. BG for Bid Security format at Annexure -III 6. Online payment through NEFT/RTGS as per Bank details given below: Name of the Bank: SBI, HAL Campus Branch: HAL Campus Account Name: Director, INCOIS Account No.10442322840 IFSC Code: SBIN0001676 The scanned copy of the same is to be uploaded to the GeM Portal while submitting the tender. Bank Guarantee should be sent by the issuing banker directly to the office of INCOIS, Hyderabad. The original DDs / Financial instruments if any should reach to INCOIS within 5 working days of Bid opening, failing which the bid may treated as incomplete & may lead to rejection of the bid by buyer without making any reference to the bidder. Micro and Small Enterprises (MSEs) and Startups recognized by DPIIT are exempted from submission of EMD upon submission of valid registration certificates and Bid Securing Declaration (Annexure- XI).
7.	**Performance Guarantee:** Successful Bidder should submit Performance Bank Guarantee 5% of the total contract value valid for 38 months, within 15 days from the date of acceptance of Purchase order as per format in (Annexure –IV) in the following form/ options: • Demand Draft • Insurance Security Bond • e-Bank Guarantee • Fixed Deposit Receipt in favour of Director, INCOIS payable at Hyderabad • Online payment through NEFT/RTGS as per Bank details given below: **Name of the Bank:** SBI, HAL Campus **Branch:** HAL Campus

Point No.	Details
	Account Name: Director, INCOIS **Account No.**10442322840 **IFSC Code:** SBIN0001676 **Performance Guarantee is liable to be invoked in the event of** Non-execution contract during validity period of the contract If the service of the successful bidder is found to be unsatisfactory and fails to adhere to our bid terms and conditions Any unilateral revision/decision made by the successful bidder during the validity period of the contract. Please refer Annexure – IV for the PBG Format.
8.	**Liquidated damages:** For delay attributable to the contractor, 0.5% of the value of the delayed portion of the work for each week or part of a week, up to a maximum of 10% of the contract value. INCOIS may also get the work done elsewhere at the contractor's risk and cost, cancel the contract or a part of it, and forfeit the performance security in full or in part. Recoveries during the warranty are as per Clause 5.6.
9.	**Prices:** Firm for the contract period, inclusive of all duties, freight, insurance, loading, unloading, storage at site and the first year of warranty; the item 20 rate is firm for warranty years 2 and 3. GST is shown separately in the financial bid on GeM.
10.	**Quantities and variations:** (a) Quantities of items 2 and 12 to 16 may vary at site. Payment will be on joint measurement at the quoted rates, within the limits allowed under GeM GTC. (b) Only a change ordered in writing by the Engineer-in-Charge is a variation. (c) Additions and omissions in items 3 and 4 are valued at the unit rates of the contractor's priced bills of materials (Annexure IX-A and IX-B). (d) Where no rate exists, the variation is paid on actual cost: materials at the price on original GST invoices and labour at the prevailing market rate, plus 15% for overheads and profit, after a check of reasonableness against market rates by INCOIS. (e) Variations shall be regularised through an amendment of the GeM contract before payment.
11.	**Labour laws:** The contractor shall comply with the four Labour Codes (Code on Wages, 2019; Industrial Relations Code, 2020; Occupational Safety, Health and Working Conditions Code, 2020; Code on Social Security, 2020) as notified, with the earlier labour enactments and State rules for provisions not yet in force, and with the CEA (Measures relating to Safety and Electric Supply) Regulations, 2023. INCOIS shall not be liable for any accident to the contractor's personnel.
12.	**Imported goods:** In case of imported products, the OEM or its authorised seller shall have a registered office in India to provide after-sales service. A certificate to this effect shall be uploaded.
13.	Bidders shall fill in and submit the compliance statements with the bid. Offers without them will be summarily rejected. Any falsification or suppression of information will lead to disqualification. Deviations, technical or commercial, shall be stated in the technical bid only.
14.	Purchase preference under the Public Procurement (Preference to Make in India) Order, 2017, as amended, and the Public Procurement Policy for MSEs will apply as notified. Rule 144 (xi) of GFR 2017 applies.
15.	The contractor shall ensure the safety and security of his workforce and of the equipment and works until they are taken over by INCOIS. Damage from any cause other than force majeure shall be made good by him at his own cost. Any loss or damage caused to INCOIS property during the work will be recovered from the contractor.
16.	**Insurance:** Transit, storage and erection all-risk insurance of the goods and works until handover, and insurance of the workers as required under the Code on Social Security, 2020, at the contractor's cost.
17.	**Sub-contracting:** Electrical works, FRP coating and crane work may be sub-contracted with the prior approval of INCOIS. The contractor remains fully responsible for the whole work.
18.	**Dispute resolution:** As per the multi-tier options provided under GeM GTC.
19.	**Termination:** Where the contractor commits a material breach, including a repeated breach after a notice to improve, INCOIS may, after 15 days' written notice to cure and the contractor having failed to cure within that period, terminate the contract in whole or in part and forfeit the performance security in full. INCOIS may also get the balance work executed at the contractor's

Point No.	Details
	risk and cost and recover the excess expenditure from any sum due to him or from the performance security. INCOIS may terminate the contract for convenience on 90 days' written notice; the contractor is then paid for the work satisfactorily done up to the date of termination and the performance security is released, with no further claim on either side. Termination does not prejudice any accrued right or remedy of either party.
20.	INCOIS reserves the right to alter the scope or reduce the quantum of work before or after the issue of the contract. Such changes will be valued as per Point 10; no other claim will be entertained.
21.	Any bidder from a country which shares a land border with India shall be eligible to bid in this tender only if the bidder is registered with the Competent Authority, i.e. the Registration Committee constituted by DPIIT, in terms of Department of Expenditure O.M. No. F.7/10/2021-PPD dated 23.02.2023 read with O.M. F.No. 6/18/2019-PPD dated 23.07.2020 and the amendments thereto. The bidder shall submit a certificate to this effect in the bid. A false certificate is ground for immediate termination and further legal action in accordance with law.
22.	**Force majeure** as per GeM GTC. Canvassing in connection with the tender is prohibited and will make the bid ineligible. Director, INCOIS may cancel the tender at any stage for technical or administrative reasons; bidders shall have no claim on this account.

9. **Pre-Bid Meeting : INCOIS has made every effort to bring out the requirements to facilitate the Firms to** make their proposals. However, keeping in view that Firms may have clarifications on certain points in this Document before submitting their Proposal, a Pre-bid meeting will be held at INCOIS, Hyderabad on 03.11.2026 **at 11 00 hrs**. During the pre-bid meet, a short intro presentation will be done by INCOIS on the proposed requirement and scope of work. All the clarifications will be consolidated and clarified to the Bidders during the pre-bid meet and addendum/corrigendum will be added in the proposal INCOIS Web site (if required only). Bidder will be given another reasonable sufficient time to submit their proposals. The bidders should participate in this meeting at their own cost. Bidders are requested to send their clarifications, if any well in advance of the Pre-bid meeting through GeM Portal only any clarification requests outside GeM portal will not be entertained .

IMPORTANT NOTE
If there is any discrepancy or contradiction, the Bid Specific Additional Terms and Conditions (ATC) shall complement the GeM GTC. Wherever GeM GTC provides a choice or allows customized configurations, the specific provisions mentioned in this buyer-added ATC shall apply.

Annexure-I

Self Declaration

(on letterhead, signed by the authorised signatory, with stamp)

I, _____, son / daughter of _____, sole proprietor / partner / director of M/s _____, having read and understood the bid No. INCOIS:PUR: 11/2026, hereby undertake that we agree to and shall abide by the scope of work, basis of the scheme, technical specifications, buy-back conditions, testing and commissioning requirements, warranty conditions and all other terms and conditions of the bid for the work "Supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two (2) existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad".

I further declare that our firm will complete the work within the stipulated period and maintain the installation as per the warranty clauses of this bid document.

Signature with date:

Name and designation:

Duly authorised to sign for and on behalf of:

Name and address of the bidder, with seal:

Annexure-II

OEM Authorisation Format (cooling tower)

(on the OEM's letterhead; to be submitted with the technical bid)

OEM's reference No. _____ Date: _____

To
The Director
Indian National Centre for Ocean Information Services (INCOIS)
Pragathi Nagar, Hyderabad 500 090

Ref.: Your bid No. INCOIS:PUR: 11/2026 for "Supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two (2) existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad".

We, _____, are manufacturers of cooling towers, with factories at _____. Our model line _____ is certified under CTI STD-201 (CTI validation No. _____). We authorise M/s _____ (name and address of the bidder) to submit a bid, process it and enter into a contract with you against the above bid, for the cooling tower manufactured by us.

No firm other than the above is authorised by us for this bid.

As principals, we commit ourselves to supervise the erection and commissioning of the tower through our authorised engineer and to issue the commissioning certificate, to extend full support for the warranty obligations as per the bid document, and to make spares available for at least ten (10) years from the date of supply.

Contact person / designation / phone / e-mail: _____

Signature with date:

Name and designation:

Duly authorised to sign for and on behalf of:

Name and address of the OEM, with seal:

Annexure-III

Bank Guarantee Format for Bid Security

Whereas _____ (hereinafter called "the Bidder") has submitted its bid dated _____ for "Supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two (2) existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad" under bid No. INCOIS:PUR: 11/2025 (hereinafter called "the Bid").

KNOW ALL PEOPLE by these presents that WE _____ (name of bank) of _____, having our registered office at _____ (hereinafter called "the Bank"), are bound unto the Director, INCOIS (hereinafter called "the Purchaser") in the sum of Rs. _____ for which payment well and truly to be made to the Purchaser, the Bank binds itself, its successors and assigns by these presents.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws or modifies its Bid during the period of bid validity; or
2. If the Bidder, having been notified of the acceptance of its Bid during the period of bid validity, (a) fails or refuses to accept the contract, or (b) fails or refuses to furnish the Performance Security.

We undertake to pay the Purchaser up to the above amount on receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser notes that the amount claimed is due to it owing to the occurrence of one or both of the above conditions, specifying the condition(s).

This guarantee will remain in force up to and including 45 days after the period of bid validity, i.e. up to _____, and any demand in respect thereof should reach the Bank not later than this date.

(Signature, name and designation of the authorised officer of the Bank, with seal)

Annexure-IV

Bank Guarantee Format for Performance Security

To
The Director
Indian National Centre for Ocean Information Services (INCOIS)
Ocean Valley, Pragathi Nagar (BO), Nizampet (SO), Hyderabad 500 090

Whereas _____ (name and address of the contractor) (hereinafter called "the Contractor") has undertaken, in pursuance of GeM contract No. _____ dated _____, the work "Supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two (2) existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad" (hereinafter called "the Contract");

And whereas it has been stipulated in the Contract that the Contractor shall furnish a bank guarantee by a scheduled commercial bank for the sum specified therein as security for compliance with its obligations under the Contract, including the three-year warranty; and whereas we have agreed to give the Contractor such a guarantee;

Now therefore we hereby affirm that we are guarantors and responsible to you, on behalf of the Contractor, up to a total of Rs. _____ (in words _____), and we undertake to pay you, upon your first written demand declaring the Contractor to be in default under the Contract and without cavil or argument, any sum or sums within the limit of the guarantee amount, without your needing to prove or to show grounds or reasons for your demand.

We hereby waive the necessity of your demanding the said debt from the Contractor before presenting us with the demand. We further agree that no change, addition or other modification of the terms of the Contract shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change.

This guarantee shall be valid until _____ (60 days beyond the end of the three-year warranty period). Our _____ branch at _____ is liable to pay the guaranteed amount on a written claim received at that branch on or before the said date, after which the Bank shall be discharged of all liability under this guarantee.

(Signature, name and designation of the authorised officer of the Bank, with seal, name and address of the branch)

Annexure-V

Eligibility Declarations

(on letterhead, with supporting documents; part of the technical bid)

Ref.: Bid No. INCOIS:PUR: 11/2025; Supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two (2) existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad.

Bidder's name and address: _____ Reference No. _____ Date _____

We confirm that we comply with all the stipulations of the bid document and declare as under, and shall provide evidence of our continued eligibility to INCOIS when requested. We, including our affiliates, subsidiaries and sub-contractors for any part of the contract:

(a) are not insolvent, in receivership, bankrupt or being wound up, do not have our affairs administered by a court or a judicial officer, do not have our business activities suspended, and are not the subject of legal proceedings for any of these reasons;

(b) do not stand declared ineligible, blacklisted, banned or debarred by INCOIS or MoES, or by any agency of the Government of India, and have not been convicted within three years before the last date of bid submission for any offence relating to procurement; we have not changed our name or created an allied firm to escape such disqualification;

(c) have no association, as bidder, partner, director or employee, with any retired official of INCOIS or near relation of such official, as barred by the bid document;

(d) have no conflict of interest affecting fair competition; our prices are competitive and arrived at without any unfair or anti-competitive means, and we have not induced and shall not induce any other bidder to submit or not to submit an offer.

Rule 144 (xi) of GFR 2017: We have read the clause on restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries. We certify that we are not from such a country or, if from such a country, are registered with the Competent Authority (copy enclosed); and that we shall not sub-contract any work to a contractor from such a country unless it is so registered.

MSE status: We are a Micro / Small / Medium enterprise / Others: _____. Udyam Registration No. _____ (certificate enclosed). Whether owned by SC/ST or women entrepreneur: _____.

Start-up status: We are / are not a start-up recognised by DPIIT (certificate No. _____).

Make in India status: Having read the Public Procurement (Preference to Make in India) Order, 2017 as amended, we certify that the local content of the offered goods and works is _____% and the value addition is made at _____ (location). We are a Class-I Local Supplier / Class-II Local Supplier / Non-Local Supplier (strike out what is not applicable). We do not belong to any country whose bidders are notified as ineligible on a reciprocal basis under this Order.

We confirm that the particulars above are correct and nothing is concealed. We understand that a false or misleading declaration would violate the Code of Integrity and attract the penalties under the bid document and GeM GTC.

Signature with date:

Name and designation:

Duly authorised to sign for and on behalf of:

Name and address of the bidder, with seal:

Annexure-VI

Site Visit Certificate

(to be signed by the INCOIS representative and uploaded with the bid; mandatory)

This is to certify that Shri / Smt. _____, representing M/s _____, visited INCOIS, Ocean Valley, Pragathi Nagar, Hyderabad on _____ in connection with bid No. INCOIS:PUR:11/2025, and has seen:

- the location of the raised platform and the pump room behind the Substation building, the access for cranes and the drain point;
- the AC plant room, the existing condenser water headers, the four condenser pumps (two to be shifted) and the probable tie-in points;
- the existing LT panel in the Substation and the cable route to the panel location;
- the three old 125 TR cooling towers on the Substation terrace offered for buy-back, their condition and the access for lowering them;
- the existing 217 TR cooling tower circuit and the probable location of MOV-03;
- the make-up water source and the restrictions on shutdowns of the AC plant.

Bidder's representative	INCOIS representative
Signature:	Signature:
Name:	Name:
Designation:	Designation:
Date:	Date and office seal:

Annexure-VII

Old Cooling Towers Offered for Buy-back

VII-A Details of the old towers

The towers below are offered on "as is where is" basis. INCOIS gives no warranty on their condition. Bidders shall satisfy themselves at the site visit.

Sl.	Tower	Capacity	Year	Make / model / Sr. No.	Type	Present condition
1	CT-1, Substation terrace	125 TR	2004	Paharpur	FRP, induced draft, axial fan	Not Working
2	CT-2, Substation terrace	125 TR	2004	Paharpur	FRP, induced draft, axial fan	Not Working
3	CT-3, Substation terrace	125 TR	2004	Paharpur	FRP, induced draft, axial fan	Not Working

Included with each tower: fan, motor, drive, basin, MS support frame on the pedestals, local piping up to the cut points fixed at the joint survey, and the old fan feeder cables. The RC pedestals and the terrace slab remain with INCOIS and shall not be disturbed.

VII-B Buy-back price form (to be uploaded in financial document/ bid only)

To be uploaded in the financial document (price break-up) column on GeM. Not to be uploaded with the technical bid. The value shall not be deducted from any BoQ item (Clause 5.1).

Sl.	Tower (Annexure VII-A)	Buy-back value offered, excluding GST (Rs.)
1	CT-1, 125 TR	
2	CT-2, 125 TR	
3	CT-3, 125 TR	
	Total buy-back value for all three towers (in figures and in words)	

We accept the below payment terms for Buy Back

*"**Buy-Back:** If INCOIS exercises the buy-back option, the single consolidated buy-back value quoted by the contractor plus applicable GST must be shown as a clear, distinct credit deduction/discount item inside milestone 02 tax invoice. If the contractor fails to incorporate this credit value, INCOIS shall unilaterally recover the entire buy-back amount plus applicable GST from the gross payable amount under this bill.*

Signature with date:

Name and designation:

Duly authorised to sign for and on behalf of:

Name and address of the bidder, with seal:

Annexure-VIII

Guaranteed Technical Particulars (GTP)

(to be filled by the bidder from the OEM datasheets; "complied" without the value is non-responsive)

Sl.	Particular	Unit	Required	Offered
Cooling tower (Clause 4.5)				
1	Make and model; CTI validation number of the offered line	-	To be stated	
2	Flow; hot water; cold water; ambient wet bulb	USGPM / °C	960 / 35.0 / 30.0 / 27.2	
3	Heat rejection at the duty point	kcal/h	≥ 10,90,080	
4	Cells; basin arrangement; equalizer size	- / - / NB	2; isolatable; to be stated	
5	Resin grade of casing, fan cylinder and fan deck; flame-spread certificate	-	FR grade; to be enclosed	
6	Fill: material, type, formed sheet thickness	- / mm	Virgin PVC film; ≥ 0.2	
7	Drift loss	% of flow	≤ 0.005	
8	Pumping head needed at the tower inlet	m WC	To be stated	
9	Fan: number, diameter, blade material, balancing grade	- / mm / - / -	1 per cell; G 6.3 or better	
10	Drive type; service factor of gear reducer (if used)	- / -	≥ 2.0	
11	Fan motor: rating, efficiency class, enclosure, insulation	kW / - / - / -	IE3, IP55, Class F, VFD duty	
12	Overall dimensions; dry and operating weight; point loads	mm / kg / kg	To be stated	
13	Nozzle sizes: inlet, outlet, drain, overflow, make-up	NB	To be stated	
14	Sound pressure level at 1.5 m from the air inlet and at 15 m; recommended clearances	dB(A) / mm	To be stated	
15	Water quality limits for the fill offered	-	To be stated	
Grillage, piping and valves (Clauses 4.6 to 4.8)				
16	Grillage steel grade; galvanising standard and zinc mass	- / g/m²	IS 2062 E250; IS 4759, ≥ 610	
17	Pipe standards; outdoor coating thickness	- / mm	IS 3589, IS 1239 (Pt 1) heavy; ≥ 3	
18	Butterfly valves: make, model, standard, rating	-	IS 13095, PN16	
19	MOV actuator: make, model, supply, enclosure, operating time	- / V / IP / s	230 V, IP67, 30 to 60	
20	Balancing valves: make, model, opening at design flow	- / %	≥ 50% open	
21	Check valves, strainers, flexible connectors: makes and models	-	To be stated	
Instruments (Clause 4.9)				
22	Gauges and PT100 transmitters: makes, models, accuracy	-	TT: PT100 Class A	
23	Wet-bulb sensor: make, model, accuracy, shield type	°C / % RH	± 0.2 / ± 2	
24	Water meter: make, class, standard	-	Class B, IS 779 / IS 2373	
Panel, cables and general (Clauses 4.11 and 4.12)				
25	CP-01: design verification certificate to IS/IEC 61439; enclosure rating	- / IP	Yes; IP54 (IP55 outdoor)	
26	VFD: make, model, rating, EMC category	- / kW / -	C2	

Sl.	Particular	Unit	Required	Offered
27	MCCB, contactors, PLC, SPD: makes and models	-	To be stated	
28	Power and control cables: make; standards	-	IS 7098 (Pt 1), IS 1554 (Pt 1)	
29	Delivery of tower, panel and valves from the date of contract	weeks	≤ 10	
30	Deviations from drawing INCOIS/ENGG/CT/2026-04 (list, or "none")	-	To be stated	

Valve Schedule and Pipe Run Schedule, with Bill of Materials Formats

1. These schedules define items 3 and 4 together with drawing INCOIS/ENGG/CT/2026-04 sheet 1 (Annexure-X). Sizes are as per the scheme and lengths are indicative. Connections to the tower follow the nozzles of the tower offered (Clause 4.7.4). The existing pump suction strainers ES-1 and ES-2 are reused with new SS screens under item 10.
2. Upload IX-A and IX-B twice: in the technical bid with makes and quantities but **without rates**, and in the financial document column on GeM**with rates**. Each priced total shall equal the GeM price of that item. Add rows for items found necessary on the shop drawings. Unit rates are used to value variations (Section 8, Point 10).

IX-A Valve schedule and bill of materials, item 4 (valves and pipe specialties package)

Tag	Description and location	Size (NB)	Qty	Make and model offered	Unit rate (Rs.)	Amount (Rs.)
V-01, V-02	Butterfly valve PN16, gear operated; cell outlet isolation	250 (to nozzle)	2			
V-03, V-04	Butterfly valve PN16, gear operated; pump suction isolation	200	2			
V-05, V-06	Butterfly valve PN16, gear operated; pump discharge isolation	200	2			
V-07, V-08	Butterfly valve PN16, gear operated; tie-in isolation, AC plant room (supply and return)	250	2			
V-09	Butterfly valve PN16, lever operated; equalizer between the cell basins	100 (as per OEM)	1			
V-10, V-11	Butterfly valve PN16, lever operated; basin drains	50 (to nozzle)	2			
MOV-01, MOV-02	Motorised butterfly valve PN16, on/off; cell inlet isolation	200	2			
MOV-03	Motorised butterfly valve PN16, on/off; isolation and changeover of the existing 217 TR tower circuit (location at joint survey)	200	1			
BAL-01, BAL-02	Balancing valve PN16 with test points; cell inlet flow setting	200	2			
NRV-01, NRV-02	Dual-plate non-slam check valve PN16; pump discharge	200	2			
STR-01	Basket strainer, SS 316 basket, 3 mm; common suction header	250	1			
STR-02	Y-strainer; make-up line	50	1			
FC-01 to FC-04	Flexible connector with control rods; pump suction (vacuum rated) and discharge	To pump nozzle	4			
FC-05 to FC-08	Flexible connector with control rods; cell inlets and cell outlets (outlets vacuum rated)	To tower nozzle	4			
FV-01, FV-02	Float valve, modulating; make-up, one per cell	50	2			
BV-01 to BV-03	Ball valve, full bore; make-up, before the meter and each float valve	50	3			
AAV-01, AAV-02	Automatic air vent with isolation ball valve (Clause 4.8.11)	25	2			

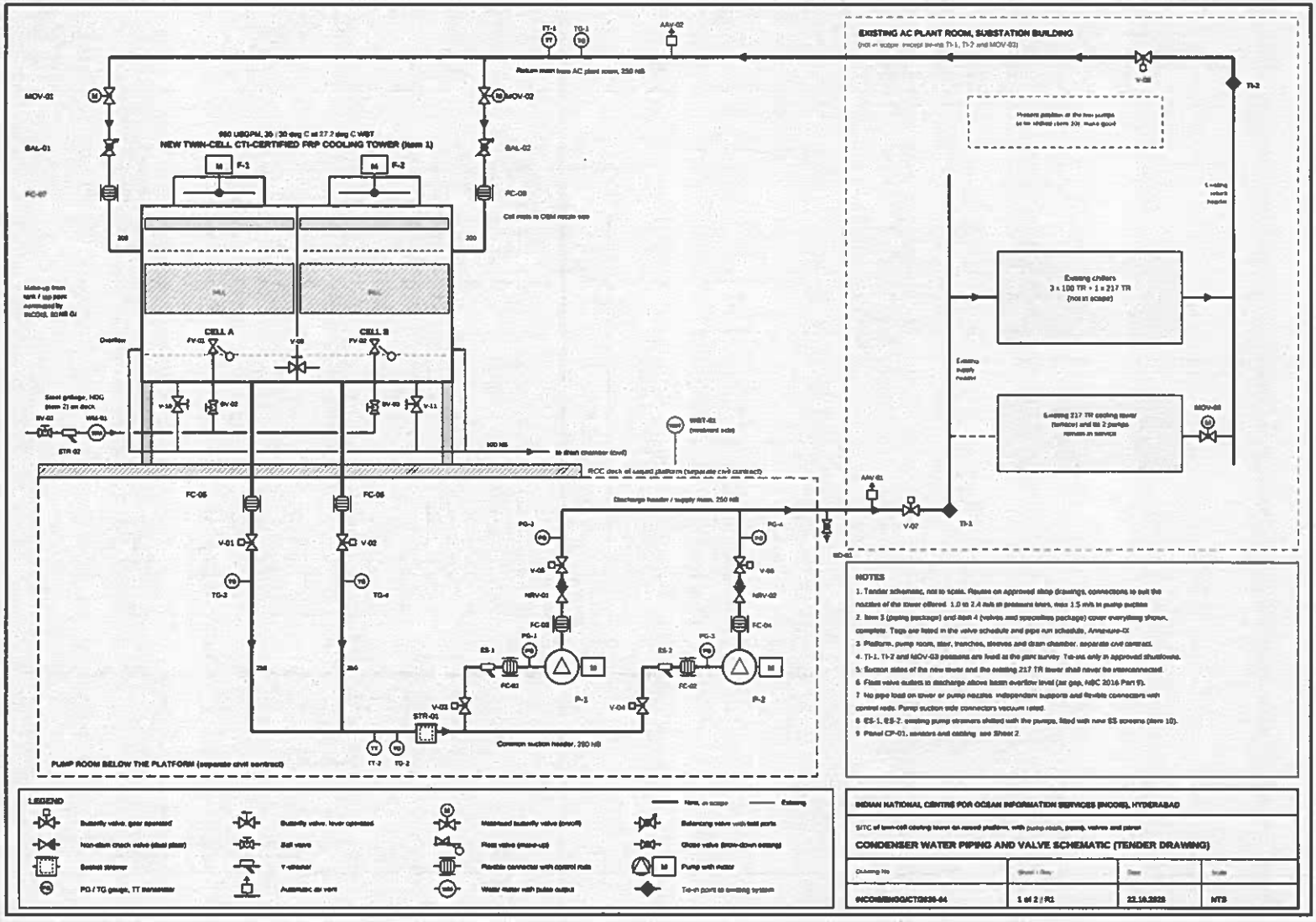
Tag	Description and location	Size (NB)	Qty	Make and model offered	Unit rate (Rs.)	Amount (Rs.)
BD-01	Globe valve with ball valve; blow-down from the discharge header	25	1 set			
DV-01 to DV-06	Ball valve; low-point drains, vents, two dosing tappings (positions on shop drawings)	25	6			
(add)	Other valves found necessary on the shop drawings (list each)					
Total, item 4 (shall equal the price quoted on GeM)						

IX-B Pipe run schedule and bill of materials, item 3 (piping package)

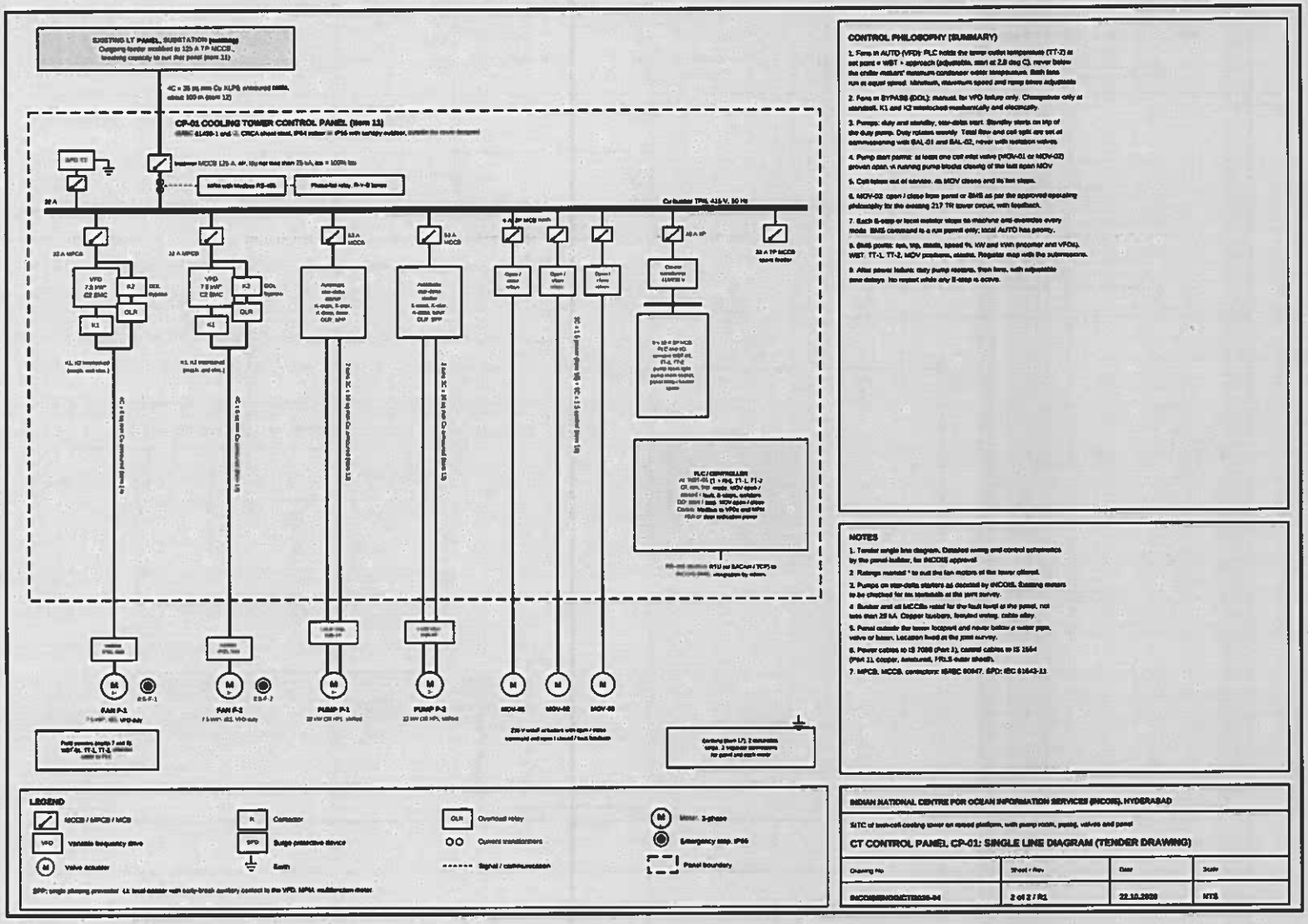
Sl.	Description (size, material, service)	Unit	Indicative qty	Qty offered	Make offered	Unit rate (Rs.)	Amount (Rs.)
1	250 NB MS ERW, IS 3589 Fe 410, wall ≥ 6 mm: supply main (pump room to TI-1), return main (TI-2 to tower), common suction header	m	60				
2	200 NB MS ERW, IS 3589 Fe 410: cell inlet branches; pump suction and discharge branches	m	24				
3	100 NB MS, IS 1239 (Part 1) heavy: equalizer; overflow and drain header to the drain chamber	m	12				
4	50 NB GI heavy (make-up line from the INCOIS tap point) and MS heavy (basin drains), IS 1239 (Part 1)	m	48				
5	25 NB MS / GI heavy, IS 1239 (Part 1): blow-down, vents, low-point drains, dosing tappings	m	15				
6	Fittings (bends, tees, reducers), all sizes	Set	1				
7	Flanges, gaskets and fasteners, PN16, all sizes	Set	1				
8	Supports, guides and anchors (outdoor hot-dip galvanised)	kg	By bidder				
9	Outdoor FRP coating and indoor painting	LS	1				
10	Sleeves not provided by the civil contract	No	By bidder				
11	Tie-ins TI-1 and TI-2 with the existing headers, in shutdown	No	2				
12	Hydro test, flushing, chemical cleaning and identification	LS	1				
13	Other items found necessary on the shop drawings (list each)						
Total, item 3 (shall equal the price quoted on GeM)							

Lengths are for assessment only. Item 3 is a lump sum for the complete system on the schematic (Clause 4.7).

Drawing INCOIS/ENGG/CT/2026-04 R1, sheet 1 of 2: condenser water piping and valve schematic (tender drawing)



Drawing INCOIS/ENGG/CT/2026-04 R1, sheet 2 of 2: control panel CP-01 single line diagram and control philosophy (tender drawing)



Annexure-XI

BID-SECURING DECLARATION FORM
(For (EMD) Exemption Bidders only)

Bid No. INCOIS: PUR: 11/2025 "Supply, installation, testing and commissioning of one (1) twin-cell FRP cooling tower of 960 USGPM on a raised platform, with condenser water piping, valves, control panel and cabling, and shifting of two (2) existing condenser pumps, under buy-back of three (3) old 125 TR cooling towers, with three (3) years comprehensive on-site warranty, at INCOIS, Hyderabad.

To
The Director
Indian National Centre for Ocean Information Services (INCOIS),
Ministry of Earth Sciences, Govt. of India,
"Ocean Valley", Pragathi Nagar (BO),
Nizampet (SO), Hyderabad - 500 090,

I/We the undersigned, declare that: I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any tender/contract with INCOIS for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, i.e., if I/We withdraw, modify, amend, impair or derogate from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or refuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Dated on _____ day of _____

Signature of the Tenderer/Authorized Signatory & date
Name of the authorized signatory:

OFFICE SEAL,

Designation:

Name of the Bidder:
Address:

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)