NOTICE INVITING TENDER (NIT)

FOR

CONSULTANCY SERVICES FOR PRE-FEASIBILITY STUDY, PREPARATION OF TECHNICAL BID SPECIFICATION, REVIEW & APPROVAL OF DETAILED DESIGN ENGINEERING & PROJECT MANAGEMENT CONSULTANCY FOR GREEN HYDROGEN & GREEN AMMONIA PLANT AT URAN, DISTRICT- RAIGAD, MAHARASHTRA.

(TO BE SUBMITTED DULY FILLED IN AND DIGITALLY SIGNED)
Tender No. MREL/2026-27/GH2 Consultant/T02

Date of issuance of invitation: **21.04.2026**

Mahagenco Renewable Energy Ltd. (MahaGenco REL), Mumbai, India invites bids from eligible bidders for Consultancy Services for pre-feasibility study, preparation of technical bid specification, review & approval of detailed design engineering & project management consultancy for Green Hydrogen & Green Ammonia plant at Uran, District Raigad, Maharashtra.

Bid document shall be available for download on website https://www.bharat-electronictender.com after acceptance tender document fee (i.e Rs. 25,000/- plus GST @18%) i.e total Rs.29,500/-(Twenty-nine thousand five hundred only).

1	Start Date of Acceptance of Tender Fee by MahaGenco REL and Download of Tender Document.	21.04.2026, 12:00 Hrs.
2	Last Date of Acceptance of Queries / Comments from Bidders	05.05.2026, 18:00 Hrs.
3	Pre-Bid Meeting	06.05.2026, 11:30 Hrs.
4	Last Date of Acceptance of Tender Fee by MahaGenco REL and Download of Tender Document	18.05.2026, 18:00 Hrs.
5	Last Date for Submission of online Bid (Techno-Commercial and Price Bids) along with EMD	19.05.2026, 14:00 Hrs.
6	Last Date for physical Submission of Techno-Commercial bid (Envelope–1)	20.05.2026, 18:00 Hrs.
7	Opening of Techno–Commercial Bids	21.05.2026, 11:00 Hrs.
8	Opening of Price Bid of Qualified Bidders	Will be intimated by mail

MahaGenco REL reserves the right to cancel / withdraw this Invitation for Bids without assigning any reason for such decision. For more details of Notice for Invitation of Tender (NIT), please visit to Bharat portal https://www.bharat-electronictender.com as well as MAHAGENCO's official website https://www.mahagenco.in For further information, kindly Contact DGM (Commercial & Contracts), MahaGenco REL, E-mail ID- *dgmcomcon@mrel.in* (Mobile no- +91 86522 00322). Further details / any amendment/ corrigendum / updates will be published only on https://www.bharat-electronictender.com only.

Sd/-
Chief General Manager
Mahagenco Renewable Energy Ltd.

1.0 INVITATION TO BID:

Bids are invited by Mahagenco Renewable Energy Limited. (MahaGenco REL), 'Prakashgad', Ground Floor, Bandra (East), Mumbai 400051, from qualifying bidders for Consultancy Services for pre-feasibility study, preparation of technical bid specification, review & approval of detailed design engineering & project management consultancy for Green Hydrogen & Green Ammonia plant at Uran, District Raigad, Maharashtra.

2.0 QUALIFYING REQUIREMENTS (QR) OF THE BIDDER

2.1 General Qualifying Requirements

i. The bidder should be an Indian Company registered under the Indian Companies Act, 2013 or Partnership Firm registered under the Indian Partnership Act,1932 or Limited Liability Partnership (LLP) registered under the Limited Liability partnership Act, 2008 or Sole Proprietorship with valid registration under any law for the time being in force or any other person indicating legal existence under any law for the time being in force.

ii. JV/Consortium: The JV/Consortium will consist a maximum of two (2) partners, i.e. Lead Partner and JV/Consortium partner. Either of the partner should have past experience in executing projects with similar scope of work as mentioned in this tender.

iii. In case of registered Companies, the copy of Certificate of Incorporation (CoI) shall be provided along with the bid documents.

iv. In case of partnership /LLP the copy of partnership deed registration or agreement shall be provided along with the bid documents.

v. Consultants or member of the joint venture/ consortium (if applicable) shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Govt. of India / State Govt./ Govt. Departments / Public sector undertakings / Any financial institution.

vi. The bidder shall have at least 10 years' experience in the field of providing Consultancy in Oil & Gas industry for planning and design of refineries/process project.

vii. Experience executing detail engineering for Clean Energy/ refinery/ petrochemical and/or process plant projects in past 15 years.

viii. Consultants or member of the joint venture/ consortium (if applicable) shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Govt. of India / State Govt./ Govt. Departments / Public sector undertakings / Any financial institution.

ix. Experience in integration of renewable power with electrolysers will be an added advantage.

x. Experience in hydrogen compression, storage, dispensing (gaseous or liquid), subsea system will be preferred.

xi. To prove/fulfil the experience criteria, bidder should submit LoI/LoA/PO/Contact agreement along with End User Completion Certificate.

In case of any confidentiality agreement with the client, the bidder can submit 3rd party CA audited certificate endorsed by the Company Director to confirm that submitted projects have been executed & completed by the organization. MahaGenco REL will evaluate & scrutinize such documents after due confirmation.

2.2 Technical Qualification Requirements

The Bidder shall have proven experience of providing consultancy services as stated below:

i. The bidder should have worked as Owner's or EPC Contractors' Engineer for Bid evaluation, review; scrutiny & approval of drawings / documents submitted by EPC contractor,

ii. The Bidder must possess demonstrable experience in providing Engineering, Procurement, and Construction Management Consultancy services with single-point accountability in at least one of the following sectors: Hydrogen Generation Plants, Refineries, Petrochemicals, Onshore or Offshore Oil & Gas Processing Facilities, Chemicals, Fertilizers, Power, Ferrous Metallurgy, or LNG Terminals.

iii. Project management and monitoring, supervision of site Erection, testing & commissioning, of at least one Green Hydrogen Production Plant Project, which should have been either in successful operation or completed.

iv. The bidder must produce one of the following documents to fulfil Technical Criteria

a. Three similar completed works total cumulative costing not less than INR 7 Crores.

OR

b. Two similar completed works total cumulative costing not less than INR 8 Crores.

OR

c. One similar completed work costing not less than INR 13 Crores.

Note- Definition of **Similar completed work** is clearly defined as follows-

a) 'Preparation of Technical due-diligence/Pre-Feasibility Report' or 'Detailed Project Report and Design Engineering/Owner's Engineer/Lender's Technical Advisor and Project Monitoring for at least Three (3) Hydrogen or its derivative Projects having capacity not less than 0.5kTPA or equivalent process industry projects.

or

b) Completed at least one Feasibility study project of 300 TPD Hydrogen **or**

c) Completed at least one FEED project for Hydrogen & Ammonia project of minimum 600 TPD capacity of Ammonia.

2.3 Eligibility Criteria of Key Personnel:

Team member	**Experience (Total)**	**Relevant projects experience**
(a) Team Leader	20+ years of experience	5+ projects of similar scope of work
(b) Deputy Team Leader	20+ years of experience	5+ projects of similar scope of work
(c) Green Hydrogen / Ammonia Expert	15+ years of experience	4+ projects of similar scope of work
(d) Project Manager / Site-in-Charge	15+ years of experience	4+ projects of similar scope of work
(e) Policy and Regulatory Expert	15+ years of experience	3+ projects of similar scope of work
(f) Plant Design Expert	15+ years of experience	3+ projects of similar scope of work
(g) Quality Assurance / Quality Check Expert	12+ years of experience	2+ projects of similar scope of work
(h) Power System Expert	12+ years of experience	2+ projects of similar scope of work
(i) Process Expert	12+ years of experience	2+ projects of similar scope of work
(j) Safety and HSE Expert	10+ years of experience	2+ projects of similar scope of work
(k) Procurement / Sourcing Expert	10+ years of experience	2+ projects of similar scope of work
(l) Discipline Experts (Mechanical/Civil/ Electrical /Instrumentation & Control/Chemical / Petro-Chemical / Network / Geo-technical)	10+ years of experience	2+ projects of similar scope of work

2.4 Financial Qualification Requirements

i. The Minimum Average Annual Turnover (MAAT) of the Bidder in the last three financial years (i.e. FY 2023-24, 2024-25 & 2025-26) must be INR 5 Crores & above. The Audited balance sheets and annual reports shall be enclosed in support of the above.

ii. The Net worth for the last financial year should be 25% of paid up share capital. “Net worth” of the bidder shall be calculated as per Company Act 2013.

iii. In case the Company does not satisfy the technical criteria & financial criteria stipulated on its own then, the financial & technical credentials of its holding company shall be submitted along with letter of undertaking from its Holding company supported by the Legal Document pledging unconditional and irrevocable financial & technical support to the bidder for the execution of the contract.

iv. In case of bidder being private or public limited Company, holding company will be decided as per the definition given in the Companies

Act, 2013. However, in case of LLP, an entity is considered as holding if it has control over the LLP as defined by the LLP agreement. Partnership firm or any other entity can't be considered as subsidiary. Hence, the clause of holding subsidiary as above will not be applicable to partnership firm or any other legal entity.

3.0 TENDERING PROCESS:

i. Each bidder shall register itself at the website address https://www.bharat-electronictender.com before the last date mentioned in the notification of invitation of bids ("NIT").

ii. The bidder is required to pay online non-refundable Tender fee of Rs. 25,000/- (Indian Rupees Twenty-five Thousand only) plus GST @18% i.e total Rs.29,500/-(Twenty-nine thousand five hundred only), on or before the last date of payment of tender fees.

iii. The bidder is required to pay non-refundable Tender processing fee of Rs. 50,000/- (Indian Rupees Fifty thousand only) plus GST @18% i.e total Rs.59,000/- (Rupees fifty-nine thousand only)

iv. EMD of Rs. 25,00,000/- (Indian Rupees Twenty-five lakh only) can be paid in the form of either NEFT / RTGS transfer in the account of MahaGenco REL or Demand Draft / Banker's Cheque in favour of "Mahagenco Renewable Energy Limited", Mumbai Payable at Mumbai or in the form of Bank Guarantee/ Insurance Surety Bond as per the prescribed format in tender document (With a validity of 120 days from the Due date of Bid Submission). The receipt of the payment must be uploaded on the e-tendering portal.

4.0 Scope of Work (Brief):

4.1 Module A:

i) MahaGenco REL's proposed Green Hydrogen project is located on 19.07 Hec. Land besides MAHAGENCO's Gas Turbine Power Station (GTPS) at Uran. The consultant has to initially carry out pre-feasibility study for assessing total possible Green Hydrogen Production Plant (that can be accommodated on 19.07 Hec. Land) with & without ammonia along with Power Evacuation Facilities, Balance of Plant & Storage facilities.
MahaGenco REL will provide inputs for assessment such as Basic Site Data such as geotechnical data, soil investigation data, Accessibility, Renewable Energy Inputs, Water Availability & Quality, Infrastructure & Utilities etc.

The successful bidder shall prepare the tender for a Green Hydrogen (GH2) production facility with an initial installed capacity of 2 kTPA.

The scope of such provision shall include, but not be limited to:

- Adequate land allocation and site layout planning for future expansion;
- Scalable and modular plant configuration, including electrolyzer systems and balance of plant;
- Provisioning in utilities, infrastructure, and interconnections (such as power supply, water systems, storage, and evacuation facilities) to accommodate enhanced capacity;

- Consideration of statutory approvals and environmental clearances, to the extent feasible, for maximum plant capacity.

ii) The consultant must carry out feasibility studies for the possible capacity that can be accommodated for proposed Green Hydrogen plant and/or Green Ammonia plant including Balance of Plant, provide a draft layout, along with techno-commercial estimates.

iii) Resource & Infrastructure Assessment:
   a. Renewable Energy Supply Optimization: Hybrid RE portfolio modelling (solar, wind, RTC/FDRE, ESS) to minimize cost while ensuring maximum electrolyzer durability
   b. Optimized Assessment of water supply, grid connectivity, preliminary geotechnical assessment and topographical assessment, etc.
   c. Land Use Optimization: Land footprint minimization with a view for modular expansion planning (from 2 KTPA to maximum possible plant capacity), and safety standards.
   d. Identify potential technical, financial, regulatory and environmental risks and propose mitigation strategies and contingency plans.
   e. Conduct preliminary Environmental and Social Impact Assessments to identify potential impacts on air, water, land and biodiversity.

iv) Technology Pathways & Options Analysis
   a. Electrolyser Technology Scenarios: Scenario-based comparison of alkaline, PEM, and SOEC across CAPEX, OPEX, efficiency, lifecycle, supply chain risk, and alignment with 2028 commissioning.
   b. Ammonia Synthesis Configurations: Energy-optimized capacity identification for Ammonia loop with reference to load-following capability.
   c. Hydrogen Derivatives Flexibility: Market study for methanol, SAF, or direct H_2 blending potential — ensuring future-proofing beyond ammonia.
   d. Transport of end Molecules: Comparative analysis of transport options for Green Hydrogen & Green Ammonia

v) Techno-Commercial Feasibility with Scenario Analysis
   a. CAPEX-OPEX Modelling: Cost build-up based on selected options.
   b. Levelized Cost Analysis (LCOH & LCOA): Scenario-based outputs showing cost sensitivity to RE price volatility, electrolyser CAPEX reductions, and efficiency gains.

vi) Implementation & Execution Roadmap (Optimisation Focused)
   a. Phased Development Optimization: Pathways for modular scaling from 2 KTPA to maximum possible plant capacity based on market trends and offtaker demand.
   b. Permits and consents: Framework development for obtaining relevant permits and approvals
   f. Develop a high-level project timeline including key milestones, permitting phases, and construction schedules.

vii) Review applicable national and local regulations, standards, and permitting requirements.

4.2 Module B:

Part B1: Preparation of Technical Bid Specification, Assistance in Bid Evaluation and LOA placement:

i) Preparation of Tender specification for selection of EPC Contractor for Design, Engineering, Manufacturing, Inspection, Testing, Supply, Packing, Forwarding, Transport & Unloading at site Construction, Erection, Testing, Commissioning, Trial Operation, Performance Guarantee Test of 10 KTPA Green Hydrogen and Green Ammonia Plant with 3 years O&M at Uran, Maharashtra.

ii) Preparation of reply to pre-bid queries, preparation of amendment to technical specifications, if any submitted by EPC contractor, vetting of design calculations, corrective measures based on the tender specifications/national & International standards.

iii) Assistance in Bid evaluation and placement of LoA and Contract signing.

Part B2: Scrutiny & approval of Detailed Design Engineering submitted by EPC contractor:

i) Design Basis Report (DBR)

ii) Design calculations & engineering drawings, Drawing schedule/Master Drawing List (MDL), Plot plan, Project Activity Schedules, General Arrangement drawing, Schematic drawings, Layout drawings, Control philosophy write-ups, Data sheets, Equipment design calculations / Selection Criterion, Manufacturing Quality Plan (MQP), Field Quality Plan (FQP), Quality Assurance Plan (QAP), Flow diagrams, Process and Instrumentation Diagrams, Billing Breakups, All types of Schedules such as cable schedule, Instrument Schedule, valve schedule, bar bending schedules etc., Process calculations for various subsystems, PG Test procedures

All other documents/drawings submitted by EPC contractor for the project but are not covered above shall be in the scope of the consultant.

4.3 Module C: Project Management Consultancy (PMC)

i) Project management and monitoring, signing of protocols

ii) Daily supervision of site erection activities,

iii) Communication of periodical reports on work performed

iv) Inspection of Material at Manufacturer's site and preparation of Trial operation and PG test approval.

Sd/-
CHIEF GENERAL MANAGER
Mahagenco Renewable Energy Ltd.