

or fail to fulfil the contractual obligations or fail to settle in full his dues to the Owner. In case of premature termination of the contract, the PBG will be encashed and the Owner will be at liberty to recover the loss suffered by it from the Consultant.

- 4) The Owner is empowered to recover from the PBG through invocation of PBG for any sum due and for any other sum that may be fixed by the Owner as being the amount or loss or losses or damages suffered by it due to delay in Performance and/or non-performance and / or partial performance of any of the conditions of the contract and / or non-performance of guarantee obligations.

4.18 Fraudulent Practices

- 1) The Bidders may please note that the Owner shall not entertain any correspondence or queries on the status of the Bids received against this RFP. Bidders are advised not to depute any of their personnel or agents to visit the Owner's office for making such inquiries.
- 2) Any effort by a Bidder to influence the Owner on the Bid evaluation, Bid comparison or Contract award decision may result in the rejection of the Bidder's Bid.

--- End of Section ---

5 Scope of Services

5.1 The Brief Description of the Project:

GUJARAT INDUSTRIES POWER COMPANY LIMITED intends to implement 2375 MW Capacity Ultra Mega Solar/Wind/Hybrid renewable energy Park having necessary infrastructures like internal & external road, storm water drainage, water supply system including disalination plant, power evacuation system including transmission line, street lighting, fencing, creation of bund(if required), administrative buildings, telecommunication system, security etc.

GIPCL would like to develop the Renewable Energy Park up to 2375MW in Phased manner as follows (Tentative time line)

Particular/ Year	May-23	Feb-24	July-25	July-26
Capacity in MW in respective Phase	600	600	600	575
Cumulative Park Capacity in MW	600	1200	1800	2375

5.2 The Brief and Broad Scope of Services:

The Project Management Consultant (PMC) is being appointed for executing the project right from Design to Commissioning & project closeout on total and single point responsibility basis. This section is to be read in conjunction with "Scope of work" mentioned in this section and other RFP terms and conditions. The scope of work of the PMC is broadly defined under the following heads but not limited to:

[a]	Review & study of basic DPR.
[b]	Design & Detailed Engineering of various works as separated in DPR
[c]	Carryout all necessary calculations and conduct all appropriate design procedure and analysis, as required, to optimize the sizing and selection of the equipment and specification of materials.
[d]	Prepare overall design basis for each work.
[e]	Preparation of item-wise cost estimate for each Material Requisition and Tender, Conduct e-tender in process for each work.
[f]	Preparation of drawings, Material Requisitions and Project
[g]	Planning & Scheduling.
[h]	Identify all the interface points / battery limits and incorporate them on relevant drawings and documents.
[i]	Review and approval of design / drawings / documents submitted by vendors / contractors / suppliers.

[j]	The consultant shall provide all technical documents for liaison assistance with statutory authorities like PGCIL, CERC, WRLDC, POSOCO, R&B, SPCB (State Pollution Control Board), Forest authorities, irrigation, CCOE (Chief Controller of Explosives), COE communing & electricity MNRE, etc. for obtaining various statutory permissions.
[k]	Preparation of Tender Documents for identified packages, evaluation of un-priced and price bids, recommendation for award of Letters of Intent, Work Orders / Purchase Orders, Contract Documents / Agreements, Purchase Requisitions (PR's).
[l]	Inspection / Expediting of equipments / materials being Manufactured by vendors including contractor-supplied items.(as and when required)
[m]	Management of Construction Stores and Stores Accounting.
[n]	Construction Management & Supervision
[o]	Quality Assurance and Quality Control.
[p]	Supervision of Project Commissioning.
[q]	Review and approval of 'As-Built Documents / Drawings'.
[r]	Project Cost Control, Management & Monitoring.
[s]	Construction supervision including certification of contractor's bills.
[t]	Single point Co-ordination with other works PMC agencies and respective contractors
[u]	Risk Management of the Project along with detailed Risk Analysis. The Risk Management Plan (RMP) & Disaster Management Plan (DMP) are also to be prepared by the Consultant.
[v]	Health & Safety Management.
[w]	Project closeout.
[x]	Review and report of Defect liability Period and issuance of specific work closer

5.3 The Detailed Scope for Project Management Consultant:

1) Park Infrastructure

- (i) Concept Development and Park Master Plan:
- (ii) Preparation of RFP and Bid Evaluation
- (iii) Post Award Engineering
- (iv) Interface Engineering and co ordination

2) Power Evacuation System including Transmission line up to CTU pooling s/s

- (i) Concept Development:
- (ii) Preparation of RFP and Bid Evaluation
- (iii) Post Award Engineering
- (iv) Interface Engineering and co ordination
- (v) Preparation and design/drawings, documents for connectivity approval and required as per Grid Authority/Grid Code.

The Broad details for above (1) & (2) are as follows;

(i) Concept Development:

The consultant shall study the DPR and prepare a concept for development of 2375MW RE Park in consultation with GIPCL along with required drawings, engineering like master layout etc. In concept development consultant shall finalize the no. of packages for development of RE Park Infrastructures in consultation with GIPCL.

(ii) Pre Bid Engineering Services:

This broadly covers:

- a) Preparation of complete bid document (RfP) with Qualifying Criteria and meetings with GIPCL to finalize RFP documents.
- b) Participation in pre Bid Conference and reply to Pre Bid queries & issue clarifications in consultation with GIPCL.
- c) Assistance in Bid evaluation, clarification
- d) Review & Vetting of Bid Evaluation report.

The brief description of scope envisaged under various Pre-Bid Engineering stages is described below:

- i. **Preparation of Bid Documents (RFPs):** Engineering Consultant has to ensure that the RFPs Documents includes all required details for successful implementation of 2375MW Renewable Energy Park.
- ii. **Pre Bid Conference & Issue of Bid Clarification The scope under this covers:**
 - The Engineering Consultant shall attend pre-bid meetings and help GIPCL in replying the queries raised by prospective bidders/GIPCL against respective tender's specifications / bids.
 - The Engineering Consultant shall prepare reply to pre-bid queries and furnish clarification/additional details in consultation with GIPCL.
- iii. **Bid Evaluations & Contracts Awarding:**
 - The Engineering Consultant shall assist in evaluation of the bids received from the RE Park infrastructures development Bidders & Contractors, issue of clarifications; participate in detailed bid discussions with the Bidders for obtaining required clarifications
 - Assist in Bid Evaluation and submit Bid Evaluation Report to GIPCL with recommendation.

- If required, the Engineering Consultant shall participate in the discussion with the bidders during negotiations for finalization of the contract.
- Engineering Consultant shall review draft contracts prepared by GIPCL and offer comments if any.
- Engineering Consultant shall assist GIPCL in preparation of contract documents along with all Annexure based on the agreed /modified Terms of the contract.

iv. Other terms & conditions, scope of work to be considered in Pre-Bid Engineering

- Engineering Consultant shall finalize techno-commercial qualifying criteria mentioned in consultation with GIPCL
- Engineering Consultant shall along with Qualifying criteria submit GIPCL back up data of similar Projects already in operation
- Engineering Consultant shall review the Bid evaluation criteria including the Bid Evaluation Factors/ Price loading factors to be considered for Bid evaluation and bring parity amongst all Bidders and submit their suggestions.
- The Bid Document prepared shall ensure fair competition for better price discovery & desired quality for the project
- Engineering Consultant shall prepare profile of reputed and prospective Bidders with their experience, capabilities, details of latest Orders & ongoing works etc., and shall be submitted to GIPCL.
- Engineering Consultant shall be responsible for defining the scope of all Termination points for each package to achieve complete RE Park infrastructure.
- Preparation/ Review of any project documents required for Bid preparation
- In case of any query related to design/plan /specification etc with respect to RE Park infrastructure project by any Statutory or other authority, Government agency etc, Engineering Consultant shall prepare reply to queries or arrange/coordinate it to obtain from contractor and submit to GIPCL. Any specific drawings/documents required to meet statutory requirement, shall be prepared by Bidder.
- In case of any revision in drawings /documents etc as required by Statutory Authorities or Law covered under the scope which are not in line with the requirement of the

prevailing norms, the same shall be prepared without any extra cost to GIPCL

- With respect to the Environmental Review, Consultant's Engineer will ensure that the specifications and subsequent technical specifications submitted by the Bidders are in conformation with the environmental limits specified by the various authorities/ Lenders' Requirements.
- The Consultant's Engineer shall review all the permits/consents required for setting up the 2375MW RE Park and ensure that all permits are in place by each Contractor.
- Consultant's engineer will review and assist GIPCL on all technical assumption to be taken in the financial model as and when required.
- Consultant's Engineer shall review other documents like soil investigation, topographical reports, Hydrology report etc.. whenever required for preparation of Bid document.
- Checking of all buildings and structures and to issue stability certificate if ever required under statutory norms.

(iii) Post contract Award Engineering

These services shall cover all works required after Award of Contract. The Post Contract /Post Bid Service shall include the followings (including but not limited to):

- a. Design Engineering Review and approval for various drawing documents submitted by contractors
 - b. Prepare and issue site/construction/interface drawings wherever required
 - c. Site Supervision services (as required by GIPCL)
 - d. Shop inspection and test witness & acceptance services. (For specific area as required by GIPCL)
 - e. Performance test procedure vetting & witness and acceptance.
 - f. Validation of any other guaranteed parameters by the Bidder/contractor
- i. Design Engineering Review Services**
- Assistance in review of engineering drawings and documents, approvals of all drawings & documentation, prepare and submit the comments to GIPCL, in line with agreed terms. The scope will cover the review of basic concepts, design criteria, design drawings, design procedures, Quality Assurance for development of

2375MW RE Park infrastructure and other equipments etc., to meet the contractual requirements.

- During the review, the following aspects shall be taken into consideration.
 - a) Scope of work
 - b) Technical requirements
 - c) Adherence to codes and standards
 - d) Compliance to environmental, CERC, GERC, any other Grid code and other statutory norms
 - e) Safety, reliability, operability and maintainability aspects
 - f) Performance of the plant(s).
- The Engineering Consultant shall review to ensure the execution is progressing along agreed contractual lines and the review shall include but not limited to cover the following:
 - a) All basic studies and concept notes and master layout
 - b) Basic as well as detailed engineering and design
 - c) Design manuals indicating design criteria, design procedures & assumptions, software details etc.
 - d) Plot plan and Area plans / General arrangement drawings of all the systems, buildings and facilities
 - e) Electrical single line diagrams
 - f) Instrumentation and control schematics, Panel configuration drawings and control room layout drawings / Logic diagrams / Protection schemes, Integration of all Solar Generators in terms of Management Information System (MIS)
 - g) Technical data sheets and performance curves/data of major plant and equipments
 - h) Verifying all design calculations of structural/foundations all systems using standard software
 - i) Verifying all the design calculations of electrical systems using standard software.
- Engineering Consultant shall review Contractor's documents is to ensure that all plant, equipment and services that are procured by the Contractor are in line with the requirements of the contract.

- Engineering Consultant shall Review and approve Quality Assurance Plan of Contractor /manufacturer. This would cover the following
 - a) Assessing the credential of Sub-Contractors proposed by the Bidder and recommendations for approval by GIPCL.
 - b) Review and finalization of the Contractor's/ Subcontractors and its vendor quality plans such as QA,FQ & QC including customer hold points for inspection. The Engineering Consultant shall indicate in the Bid proposal the customer hold point that is necessary to ensure quality.
 - c) Review and finalization of shop and site performance test procedures for all major equipment and systems.
 - d) Suggest proven vendor/OEM at any stage for equipment(s)/system(s).

ii. Project Management & Co-ordination Services:

The Project Management Services and responsibilities would include the following:

- Technical assistance to GIPCL in settlement of claims and disputes along with submission of recommendation.
- Assisting GIPCL in providing solutions to resolving design related problems and contractual problems and site related issues with any specific technical inputs as required by GIPCL.

(iv) **Interface Engineering and co ordination:** Consultant shall ensure smooth integration of various packages/contractor scopes and ensure coordination to achieve the ideal RE Park Infrastructure.

(v) Preparation and design/drawings, documents for connectivity approval and required as per Grid Authority/Grid Code.:

- The RE Park will be connected with Central Transmission Utility (CTU) network/ Power Grid Corporation of India Ltd (PGCIL) and power may be drawn at various states including Gujarat.
- Consultant shall ensure all the requirement for Grid code for CERC, CTU, PGCIL, GERC, WRLDC/XRLDC, POSOCO, Smooth integration of all the developers, communication data supply to respective authorities for grid etc..

3) Site Supervision and Construction Management Services

APPOINTMENT OF CONSULTANT FOR PROJECT MANAGEMENT CONSULTANCY (PMC) SERVICES FOR DEVELOPMENT OF 2375 MW CAPACITY SOLAR/WIND/HYBRID RENEWABLE ENERGY PARK AT GREAT RANN OF KUTCH AREA, IN THE STATE OF GUJARAT

- i. The Engineering Consultant shall deploy at site required manpower to supervise construction, Quality check, erection, testing & commissioning of the plant as per specific requirement of GIPCL.
 - ii. Certification of work done by contractors. This includes certification for process of invoices raised for site work by contractors.
 - iii. Review of pre-commissioning checklists for various equipments and systems.
 - iv. Review of documents for testing, commissioning, performance testing for establishing guaranteed performance parameters.
 - v. Witness Performance Guarantee at site & factory acceptance Test at works as per applicable code & standards and evaluation of test results, with comments/recommendations, conduct independent calculations to verify test results
 - vi. Approval/acceptance & certification of PG Test results as per Guarantee schedule of the contract.
 - vii. Preparation of list of incomplete jobs and defects, if any to be attended by the contractors/supplier as and when required by GIPCL.
 - viii. Review & recommendation for LD/Time Extension case, insurance claims or any other claims by Contractor if required by GIPCL.
 - ix. Deputation of Man Power shall be Pre-Approved from GIPCL and as directed by GIPCL only.
- 4) Inspection and Expediting Services
- The scope shall include witnessing the shop Inspection tests at the manufacturer's works as per GIPCL requirement for selective critical equipment only
 - The Engineering Consultant shall be required to depute experienced personnel for stage inspection to vendor's works.
 - All visit reports shall be submitted to GIPCL within maximum one week time.
- 5) Review of Plant Performance Test procedure and Witness of PG Test :
- Consultant shall review the Performance Test procedure and witness the PG test and submit the recommendation/approval.
- 6) Review of As Built Drawings and Preparation of O&M Manuals
- Consultant shall review the As Built Drawing and prepare O&M manuals and submit the same to GIPCL.
- 7) Preparation of As built drawings, O&M Manuals for RE Park with required SoPs as per final configuration.
- 8) Contract Closing
- Consultant shall help to GIPCL for closing of the contract and ensure all the deliverables has been submitted by respective contractors/suppliers as per RfP documents etc.
- 9) Others:

APPOINTMENT OF CONSULTANT FOR PROJECT MANAGEMENT CONSULTANCY (PMC) SERVICES FOR DEVELOPMENT OF 2375 MW CAPACITY SOLAR/WIND/HYBRID RENEWABLE ENERGY PARK AT GREAT RANN OF KUTCH AREA, IN THE STATE OF GUJARAT

- All the required reports, documents, drawings, data, details, etc. shall be submitted by consultant.
- Engineering Consultant shall provide one reproducible and editable soft copy on CD of each of the drawings/ documents for preliminary / bid drawings in numbers as required for bidding purpose as well as statutory and non-statutory requirements / clearances, etc. (including but not limited to staad file, Autocad file, system study file, PSCAD file and any other software's soft file etc.) The final as built drawings /documents/approved drawings /plant data to be submitted by contractor shall be scrutinized & verified for correctness of content & scope as per contract prior to submitting to GIPCL.
- All the drawings, documents, reports, etc. submitted by the Engineering Consultant should be clear & legible.
- Consultant's Engineer shall be required to submit soft copies on C.D. / Pen Drive and through E-mail for all drawings / documents / RFP / RFQ etc. While transmitting any data through any electronic media, bidder shall ensure its privacy and secrecy.
- Engineering Consultant shall not provide any data, drawings, design memorandums, specifications and studies pertaining to the project to third party without written consent / approval designated authority of GIPCL.
- All drawings, diagrams, designs, specifications, material lists, flow sheets, patterns and other engineering documents prepared in connection with this Project shall remain properties of GIPCL and while in the custody of the Engineering Consultant shall be fully available to GIPCL and its duly authorized representatives. Those documents & drawings handed over by GIPCL to Engineering Consultant for their study, on completion of the assignment, the same shall be delivered by the Engineering Consultant to GIPCL and no use /reference/disclosure to third party in any form shall be made.
- The scope in this section only outlines, but not limited to, the services expected from the Engineering Consultants for the project. It is not the intent to specify minute details of services to be provided. All technical matters/ packages/ systems/ equipments, which are required for the integrated, smooth & efficient operation of the Renewable Energy Park as a whole, are deemed to be included in the scope of services whether specifically mentioned or not. The Engineering Consultant shall extend the necessary, comprehensive, timely and effective services in all respects till completion of the Project.
- Any of the services though not specified in the specification / scope of work above but considered explicitly necessary for completing the obligations shall be included in the scope of Consultancy Services