Request For Quote

For Design, Supply, Installation, Testing, Commissioning and Comprehensive O&M of a 3 MW (AC) Grid-Connected Solar PV Power Plant in Karnataka

Tender No. SMCRI/Tenders/2026/978 **dt.02.11.2026**

Section 1: Notice Inviting Tender (NIT)

On behalf of The Sole Trustee, Sree Siddaganga Math (hereinafter "the Owner") The Secretary, Medical Services-SMCRI invites sealed bids from eligible, experienced Engineering, Procurement and Construction (EPC) contractors for the design, engineering, supply, installation, testing, commissioning, grid synchronisation and five (5) years of comprehensive operation and maintenance (O&M) of a **3 MW (AC) grid-connected solar photovoltaic power plant** on a turnkey basis.

1.1 Key Information

Item	Details
Name of work	3 MW (AC) Grid-Connected Solar PV Plant, turnkey EPC with 5-year O&M
Location	Contractor has to specify land location for optimum power generation, Closer to feeding station preferably with 33KV and above voltage levels and land has to be registered in the name of the Owner
Plant capacity	3 MW AC at inverter output; DC capacity to be sized by bidder (minimum [3.9] MWp)
Mode	Ground-mounted
Intended use of power	Self-consumption at their facility in Tumakuru net metering / open access / group captive
Estimated cost	Rs. 10 Cr (Rupes Ten Crores)
Tender fee	Nil (Limited Tender)
Earnest Money Deposit (EMD)	Rs. 2,00,000/- (Rupees Two Lakh Only)
Completion period	6 months from date of Letter of Award (LoA)
Bid validity	90 days from bid due date

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1.2 Schedule of Dates

Event	Date and Time
Release of tender document	02.11.2026
Pre-bid meeting and site visit	After 03.11.2026 till last date of bid
Last date and time for bid submission	12.11.2026 4 pm
Opening of technical bids	Will be notified
Opening of financial bids (qualified bidders only)	Will be notified

1.3 Contact for Communication

The Secretary-Medical Services, Siddaganga Medical College & Research Institute, 02/11/26. Dr. Sree Sree Shivakumaraswamiji Road, TUMAKURU 572102, Karnataka. Ph: 0816 4068624

For technical clarifications Electrical Engineer, SMCRI Ph: 8088641112

Section 2: Instructions to Bidders

2.1 General

1. Bids must be submitted in two parts: **Part A – Technical Bid** and **Part B - Financial Bid**, in separate sealed envelopes together put into one sealed cover by RPAD or in person.
2. The bid shall be in English, signed by an authorised signatory with a valid power of attorney or board resolution.
3. The Owner reserves the right to accept or reject any or all bids, to cancel the tender, or to modify the scope or quantity, without assigning any reason and without any liability.
4. Canvassing or influencing in any manner will lead to disqualification.

2.2 Eligibility / Pre-Qualification Criteria

No	Criterion	Documents Required
1	Bidder must be a registered Company, LLP or Partnership Firm in India	Certificate of Incorporation, PAN, GST registration
2	Minimum average annual turnover of Rs. 10 Cr crore in the last 3 financial years	CA-certified Certificate
3	Positive net worth in the last financial year	CA certificate

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4	Experience: successful commissioning of grid-connected solar PV projects with aggregate capacity of at least 10 MW AC, including at least one single project of 3 MW AC or more, in the last 5 years, with at least one year of operation	Work orders, completion / commissioning certificates, client performance certificates
5	Valid electrical contractor licence (Karnataka) with supervisor and wireman competency as applicable	Licence copies
6	Registration under EPF, ESI and other applicable labour laws	Registration copies
7	Not blacklisted or debarred by any government body, PSU or institution; no pending litigation affecting ability to perform	Notarised self-declaration
8	Authorisation from module and inverter manufacturers (or bidder to name approved makes)	MAF / declaration
9	Empanelment or registration with MNRE / SECI / KREDL / BESCOM or equivalent (desirable)	Certificates

NOTE: Consortium bids are not allowed

2.3 Earnest Money Deposit (EMD)

1. EMD of Rs. 2,00,000/- (Rupees Two Lakh) shall be furnished by Demand Draft in favour of "The Sole Trustee, Sree Siddaganga Math", payable at Tumakuru.
2. EMD of unsuccessful bidders will be returned without interest within 30 days of tender opening. EMD of the successful bidder will be adjusted against the Performance Bank Guarantee.
3. EMD shall be forfeited if the bidder withdraws the bid during its validity, fails to sign the contract, or fails to furnish the Performance Bank Guarantee (PBG).

2.4 Pre-Bid Meeting

Any pre-bid meeting can be held at our medical college office with our engineering staff on prior appointment.

2.5 Documents to be Submitted with Part A (Technical Bid)

1. EMD proof
2. Bid covering letter and acceptance of all tender terms (Annexure A)
3. Pre-qualification documents as per 2.2
4. Preliminary design: layout drawing, single-line diagram, shading analysis, and energy yield estimate (PVsyst or equivalent) with P50 / P90 values
5. Technical datasheets and test certificates for all major components (modules, inverters, transformers, switchgear, cables, structures, monitoring system)
6. Proposed make and model list (Annexure B), conforming to Section 4
7. Project execution schedule (bar chart) and manpower plan

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8. O&M plan, including spares, manpower and cleaning methodology
9. Declaration of no deviation, or a separate list of deviations (Annexure C)
10. Power of attorney / board resolution for the signatory

2.6 Part B (Financial Bid)

Prices shall be quoted in Indian Rupees on the Price Schedule (Annexure D), as a firm lump-sum price with GST, which is to be shown separately. Prices shall remain firm during the contract period, with no escalation, except for statutory changes in GST or duties after the bid due date.

2.7 Evaluation of Bids

1. **Stage 1 – Responsiveness and pre-qualification:** bids not meeting Section 2.2 or lacking mandatory documents will be rejected.
2. **Stage 2 – Technical evaluation:** compliance with Section 4 specifications, design quality, proposed makes, guaranteed generation, and O&M plan. Bidders must score at least 70 out of 100 to qualify.
3. **Stage 3 – Financial evaluation:** financial bids of technically qualified bidders will be opened. The award will be made to the lowest evaluated bidder ([L1] basis, after considering the present-value cost of O&M, if any) [*or* by Quality-and-Cost Based Selection with weightage 70:30].
4. The Owner may negotiate with the L1, L2 and L3 bidders, seek clarifications, and verify claims by visiting the bidder's reference plants.

2.8 Award of Contract

A Letter of Award (LoA) will be issued to the successful bidder, who must within seven days accept it, furnish the Performance Bank Guarantee (PBG), and sign the contract agreement on stamp paper of appropriate value at the bidder's cost.

Section 3: Scope of Work

The scope is a complete turnkey solution, including but not limited to:

3.1 Design and Engineering

1. Detailed site survey, topographical survey and geotechnical investigation.
2. System sizing, DC-AC ratio optimisation, string design, shading and yield analysis.
3. Detailed design of civil, mechanical, electrical, earthing, lightning protection, SCADA and communication systems.
4. Preparation and submission of drawings and calculations for the Owner's approval, and for approval by the Chief Electrical Inspectorate and the distribution licence (BESCOM / relevant ESCOM).

3.2 Supply and Installation

1. Solar PV modules, mounting structures with foundations, DC cables, string combiner boxes / string inverters, central or string inverters, AC cables, LT/HT panels, step-up transformer(s), HT switchgear and metering as per the evacuation arrangement.

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2. Earthing and lightning protection, fire protection, security fencing and lighting, internal roads and drainage (for ground-mounted plant), control room / inverter room.
3. Transmission line with suitable towers, poles, conductors, insulators, and hardware along the route and building or expanding a dedicated bay at the designated substation to terminate and inject the power.
4. Complete site grading, clearing, leveling, and boundary wall/fencing, required road construction.
5. SCADA, CCTV, data logger, weather monitoring station (pyranometer, ambient and module temperature sensors, anemometer) and remote monitoring on web and mobile.
6. Module cleaning system as proposed (manual with water supply arrangement, or semi-automatic / robotic).
7. Safety signage, firefighting equipment, first-aid and safety equipment.

3.3 Statutory Approvals and Grid Interconnection

1. Bidder shall, on behalf of the Owner, obtain all approvals, including electrical inspector approval, interconnection approval and technical feasibility from the distribution licence, metering and synchronisation permissions, and compliance with KERC regulations and CEA technical standards as applicable.
2. Statutory fees payable to government agencies will be reimbursable at actuals
3. Obtaining approvals under net metering / open access / captive status (as applicable to the chosen mode) shall be coordinated by the bidder with the Owner.

3.4 Testing, Commissioning and Handover

1. Pre-commissioning tests, performance ratio (PR) test, capacity (CUF) test and grid synchronisation.
2. Training of the Owner's personnel, delivery of as-built drawings, O&M manuals, test reports, warranty certificates and software licences.

3.5 Operation and Maintenance (5 Years)

Comprehensive O&M from the Commercial Operation Date (COD), including preventive and breakdown maintenance, module cleaning at the proposed frequency, vegetation control, inverter and transformer servicing, spares, monthly reports, Coordination with ESCOMs for monthly wheeled energy settlement, regulatory compliance and maintaining minimum plant availability of 99%. O&M may be extended by mutual agreement at rates quoted in the Price Schedule.

3.6 Items Provided by the Owner

NIL

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Section 4: Technical Specifications (Minimum Requirements)

All equipment shall be new, of first quality, and conform to the latest applicable IEC / BIS / CEA standards.

4.1 Solar PV Modules

Parameter	Requirement
Type	Mono-crystalline, bifacial / mono-facial (TOPCon or higher efficiency)
Minimum rating	545 Wp or higher
Standards	IEC 61215, IEC 61730, IEC 61701 (salt mist) / IEC 62716 (ammonia) as applicable
Domestic content / ALMM	Modules (and cells, where applicable) must comply with the MNRE Approved List of Models and Manufacturers (ALMM) in force on the bid due date. [DCR requirement applies / does not apply]
Product warranty	Minimum 12 years
Performance warranty	Linear: minimum 87.4% of rated output at end of 30 years (or manufacturer's better terms); first-year degradation not more than 1%
Tolerance	Positive only (0 to +3%)
Testing	Third-party flash test report for each lot; RFID / serial number traceability

4.2 Inverters

Parameter	Requirement
Type	Grid-tied string or central inverters with MPPT
Rated AC capacity	Aggregate 3,000 kW AC at rated conditions
Efficiency	Euro efficiency not less than 98%
Standards	IEC 62109-1/-2, IEC 61727, IEC 62116 (anti-islanding), IEC 61000 series (EMC), IEC 60068 (environmental)
Protection	Minimum IP65 (outdoor); over/under voltage and frequency, DC reverse polarity, surge, earth fault
Grid support	Reactive power control, low-voltage ride-through, power factor 0.95 lead/lag, remote curtailment
Warranty	Minimum 5 years standard, extendable to 10 years (price to be quoted separately)

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4.3 Mounting Structures

Hot-dip galvanised steel (minimum 80 microns zinc coating, IS 4759) or equivalent corrosion-resistant material; designed for wind speed per IS 875 (Part 3) for the site, with a minimum design life of 25 years. Tilt and orientation optimised for the site. Foundations (pile / pedestal) designed on the basis of geotechnical report, with pull-out tests.

4.4 Cables and Accessories

DC cables: UV-resistant, double-insulated, copper or aluminium, as per IEC 62930 / EN 50618. AC cables: XLPE armoured, as per IS 7098 / IS 1554. Cable losses limited to not more than 1% on DC side and 1% on AC side. MC4 or equivalent certified connectors.

4.5 Transformers, Switchgear and Metering

Oil-filled or dry-type step-up transformer(s) of BIS-star-rated efficiency; HT breakers, isolators, lightning arrestors and CTs/PTs as per distribution licence requirements. ABT-compliant, class 0.2S tri-vector meters (main and check) with CT/PT accuracy as specified by the distribution licence.

4.6 Earthing, Lightning and Surge Protection

Comprehensive earthing as per IS 3043 and lightning protection as per IEC 62305, with earth resistance not exceeding the specified limit with earthing test reports, Surge protection devices on DC and AC sides.

4.7 SCADA and Monitoring

Real-time monitoring of string, inverter and plant-level data, energy and irradiance, alarms and events, PR and CUF calculation, cloud-based dashboard and mobile access, data retention for at least 5 years, open-protocol (Modbus / IEC 61850) interface to the Owner.

4.8 Performance Guarantee

1. **Performance Ratio (PR):** not less than 78% at the time of commissioning test and an annual average not less than 75% over the O&M period, adjusted for module degradation.
2. **Minimum annual generation (CUF-based guarantee):** ..... kWh per kWp in the first year, reducing per the module degradation curve in subsequent years.
3. **Plant availability:** not less than 99% during daylight hours.
4. Shortfall will be compensated at the rate of ₹ 8.00 per kWh of shortfall, recoverable from payments or the PBG.

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Section 5: Commercial Terms and Conditions

5.1 Contract Price and Taxes

Lump-sum, firm price. GST at the prevailing rate will be paid extra against valid tax invoices. Applicable TDS and statutory deductions will be made.

5.2 Payment Terms (Indicative)

Milestone	Payment
Advance against Bank Guarantee, on signing of contract	30%
On arrival of 100% components at site and after testing	30%
On successful commissioning and grid synchronisation	25%
After handover, documentation and successful 1-year performance test (retention can be released against Bank Guarantee)	15%

O&M charges will be paid [quarterly / half-yearly] in arrears, as quoted. Payments will be made within 30 days of receipt of an undisputed invoice with supporting documents.

5.3 Performance Bank Guarantee (PBG)

PBG of 10% of the contract value from a scheduled / nationalised bank, valid for the completion period plus 12 months, then replaced by an O&M guarantee of 5% valid until the end of the O&M period plus 3 months.

5.4 Time Schedule and Liquidated Damages

1. Time is of the essence. Commissioning shall be completed within 6 months of the LoA.
2. For delay not attributable to the Owner or force majeure, liquidated damages of 0.5% of entire contract value per week of delay, subject to a maximum of 10%.
3. Delay beyond the LD cap entitles the Owner to terminate and recover the cost of completion from the contractor.

5.5 Warranties

The contractor warrants workmanship and the whole plant free from defects for five years from COD, in addition to the manufacturers' warranties (modules, inverters) which shall be assigned to the Owner.

5.6 Insurance

The contractor shall maintain, at its cost, contractor's all-risk / erection-all-risk insurance, marine-cum-storage-cum-erection (transit) insurance, workmen's compensation, and third-party liability insurance until handover. Insurance during O&M will be by the Owner .

5.7 Inspection and Quality Assurance

The Owner or its appointed third-party inspector may inspect materials at the manufacturer's works and at site. Pre-dispatch inspection of modules and inverters is mandatory. Defective or non-conforming material shall be replaced at the contractor's cost.

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5.8 Safety, Labour and Compliance

The contractor shall comply with the Electricity Act, 2003, CEA safety regulations, Building and Other Construction Workers Act, the Contract Labour Act, minimum wages, PF/ESI, and all other applicable laws. No child or bonded labour. The contractor is solely responsible for site safety, and shall employ a qualified safety officer. Fatal or major accidents shall be reported immediately.

5.9 Intellectual Property and Software

All design documents, drawings, SCADA configuration and data will be the property of the Owner. Software licences shall be perpetual and transferable to the Owner at no extra cost.

5.10 Subcontracting

Not permitted for the whole work. Part subcontracting requires the Owner's prior written approval; the contractor remains fully responsible.

5.11 Force Majeure

Neither party is liable for delay caused by events beyond reasonable control (natural calamities, war, epidemic, government orders). The affected party shall notify the other within seven days. Extension of time (without cost) will be granted for the period of force majeure.

5.12 Change in Law

Changes in statutory duties or taxes after the bid due date will be borne by or credited to the Owner, with documentary proof.

5.13 Termination

The Owner may terminate the contract for default (including abandonment, repeated non-performance, insolvency, or corrupt practices) after a 15-day cure notice, forfeit the PBG, and complete the work at the contractor's risk and cost. The Owner may also terminate for convenience on 30]days' notice, paying for work done.

5.14 Limitation of Liability

The contractor's aggregate liability shall not exceed 100% of the contract value, except for gross negligence, wilful misconduct, fraud, or third-party injury/death claims.

5.15 Dispute Resolution and Jurisdiction

Disputes shall first be settled through mutual discussion within 30 days, failing which they will be referred to arbitration by a sole arbitrator appointed by mutual consent under the Arbitration and Conciliation Act, 1996. The seat of arbitration shall be Tumakuru . Courts at Tumakuru shall have exclusive jurisdiction. The contract is governed by Indian law.

5.16 Integrity and Ethics

Bidders shall observe the highest standards of ethics. Offering or accepting any bribe, collusion, or submitting false information will lead to rejection, forfeiture of EMD/PBG and debarment.

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Section 6: Annexures (Formats)

(All formats on letterheads with signature and seal)

Annexure A: Bid Covering Letter

To,
The Secretary,
Medical Services, SMCRI,
Dr. Sree Sree Shivakumaraswamiji Road,
Tumakuru 572102, Karnataka

Subject: **Bid for Tender No. SMCRI/Tenders/2026/978 dt. 28.10.2026– 3 MW (AC) Solar PV Plant**

We, [name of bidder], having examined the tender document and visited the site, offer to execute the work in accordance with the terms and conditions of the tender. We confirm that our bid is valid for 120 days from the bid due date, that we have enclosed the EMD of Rs. 2,00,000/- (Rupees Two Lakh Only), and that we agree to be bound by all terms of the tender.

Signature, name, designation, seal, date and place.

Annexure B: Proposed Make and Model Schedule

Item	Manufacturer	Model	Rating / Capacity	Country of origin	Standards and certificates
PV modules					
Inverters					
Transformer(s)					
HT switchgear					
DC / AC cables					
Mounting structure					
SCADA / data logger					

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Energy meters					

Annexure C: Deviation Statement

Clause no.	Tender requirement	Proposed deviation	Reason

If no deviation, state "Nil – fully compliant."

Annexure D: Price Schedule (Part B)

Sl.No.	Description	Unit	Qty	Rate (₹)	Amount (₹)
1	Area of land required for the proposed plant.	Acres			
2	Design, supply, installation, testing and commissioning of 3 MW AC solar PV plant, complete (turnkey)	Lump sum	1		
3	Statutory approvals and grid interconnection (if separately priced)	Lump sum	1		
4	Comprehensive O&M, Year 1	Year	1		
5	Comprehensive O&M, Year 2	Year	1		
6	Comprehensive O&M, Year 3	Year	1		
7	Comprehensive O&M, Year 4	Year	1		
8	Comprehensive O&M, Year 5	Year	1		
9	Optional: inverter warranty extension to 10 years	Lump sum	1		
10	Optional: O&M extension, years 6–10 (per year)	Year	1		
	Total (excluding GST)				
	GST at applicable rate				
	Total (including GST)				

Amount in words:

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Annexure E: Land Details

Land on which the proposed plant will be installed should be registered in the name of the Owner. The land should be ready to use for the said purpose of power generation. Area of land, cost per acre, its location(including GPS coordinates, photo) should be submitted on a separate sheet. Proposed land should have clear approach road. Land cost along with its registration cost will be paid by the Owner. The land title should be clear of all encumbrance and litigations.

Annexure F: Performance Bank Guarantee Format

To be issued on stamp paper by a scheduled / nationalised bank in favour of Sree Siddaganga Math, for Rs. ....., valid until [date], payable on first written demand without recourse to the contractor.

Annexure G: Format of Self-Declaration (Non-Blacklisting)

We, [bidder], declare that we have not been blacklisted, debarred or declared ineligible by any government department, PSU, or institution in India, and that no criminal or insolvency proceedings are pending against us or our directors that affect our ability to perform this contract. Notarised on stamp paper.

Annexure H: Format of Contract Agreement

The contract agreement shall be executed between Sree Siddaganga Math and the successful bidder, incorporating this tender document, all corrigenda, the bidder's accepted offer, the LoA, and the price schedule, with order of precedence as: (1) Contract agreement, (2) LoA, (3) Corrigenda, (4) Tender document, (5) Bid.

This tender document has 12 pages.

For S M C R I

Secretary – Medical Services

Dt: 02.11.2026

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Appeal for upload to web site

2/11/26