



INVITATION FOR BIDS NO. EGAT 10/2559-MSEP

FOR

MAEHONGSON SMART ENERGY DEVELOPMENT PROJECT

The Electricity Generating Authority of Thailand (EGAT) hereby invites sealed bids for design, manufacture, fabrication, shop tests, supply, delivery to Site, insurance, construction, installation, testing, commissioning, maintenance, on-site training, guarantee of the Equipment and civil works for Maehongson Smart Energy Development Project. The Project comprises of the Crystalline Silicon PV Power Plant which shall be not less than 2.9997 MWp and not more than 3 MWp and Battery Energy Storage System (BESS) which shall have storage capacity to supply 4 MW continuous power measured at Power Conversion System (PCS) output for 15 minutes.

This project is financed by EGAT's Fund.

Place of Construction : Muang District, Maehongson Province

Medium Cost : THB 377,000,000.- (including Value Added Tax)

Description of Works

The Contractor shall be responsible for the completion of engineering, procurement, construction, installation, testing, commissioning, start-up and performance verification Work to the standard specified and best modern practice of Maehongson Smart Energy Development Project in accordance with the bidding documents.

The Work under this Project shall be coordinated with the Work furnished by EGAT under separate contracts, however the installation is scheduled to be performed concurrently at the site.

The general scope of Work shall be as follows:

1. Design, engineering, and construct, entire Project.
2. Procure and furnish all materials, equipment, tools, labor, supervision and services required for completion of the Project, including
 - Pre-shipment testing of equipment in the supplier's factory

- Seaworthy packing, dispatch properly packed and transport to CIF Thai Port, and unloading at this port
 - Loading at the port, transport and insurance to the site of all equipment and materials supplied from aboard for the project
 - Dispatch properly packed, transport and insurance to the site of all equipment and materials supplied from sources in Thailand
 - Unloading at the site, storage, handling and receiving of all equipment and materials
 - Customs clearance
 - All insurance as required by Clause GC-25
 - In case of military materials, hazardous substances and industrial radiation materials such as chlorine gas, gas mask with breathing air tank, SO₂ mixed gas, CO mixed gas, Americium-241 (Am-241), etc. to be furnished for use in this project, the Contractor shall procure them within domestic market only, the importation of these materials will allow just in case of domestic market procurement could not be done. The Contractor shall have EGAT's approval prior to procure these materials from abroad and shall inform EGAT the delivery date of not less than 150 days before arrival at site.
3. Install, construct and connect to interfacing utilities, services and facilities and connect to PEA distribution system.
 4. Commissioning and start up the plant.
 5. Perform all performance guarantee and testing.
 6. Provide classroom training at site, and certification of EGAT's operating and maintenance personnel.
 7. Prepare and provide record drawings, erection, installation, construction, operation and maintenance manuals.
 8. Obtain all permits and/or approvals necessary for the Work, excluding permits and/or approvals listed in Item 1000-4.2, which shall be obtained by EGAT.

For the purposes of clarity, permits and/or approvals in the responsibility of the

Contractor shall include, but are not limited to;

- Heavy equipment transportation Approval
- Certification of pressure vessels and approval of detailed design (for the Factory Operation Permit)
- Permit to import/possess the military materials
- Permit to import/possess the hazardous substances

- Permit to import/possess the industrial radiation materials
 - All permits and/or approvals for temporary works/structures
 - Certification of stationary cranes safety inspection.
9. Heavy Transport Study and resolve problems concerning transport of heavy equipment.
 10. In many cases, a Thailand Registered Engineer shall be required to review and approve portions of the Project and its design. The Contractor shall be responsible for any engineering review of this nature.
 11. Investigate the Job Site for all construction utility requirements.
 12. Responsible for design and construction methods, means, techniques and procedures, and for the establishment of and compliance with safety procedures.
 13. Arrange for complete and safe receiving, handling and storage of all materials, equipment and construction equipment, including, but not limited to, inspection, expediting, shipping, unloading receiving, protection and rectifying any loss or damage. This shall include negotiating exemptions and paying all import licenses.
 14. Provide all temporary construction camp, construction plant and facilities, construction materials, equipment, supplies and construction utilities and facilities required by the Contractor to complete the Project.
 15. Provide site security and safety during construction.
 16. Clear the site of temporary structures, surplus material and equipment.
 17. Dispose of all rubbish according to EIA requirements or as directed by EGAT.
 18. Promptly after the Letter of Intent Date, the Contractor shall provide to EGAT a Notice in the form of a comprehensive Safety Manual describing the programs to be used by Contractor in the performance of the Work, including but not limited to safety, security, fire and first aid. EGAT shall have the right to review, comment on and audit such programs. EGAT reserves the right to perform ongoing audit of the Contractor and Subcontractors against Safety Manual requirements. The Contractor shall make such changes therein as are reasonably requested by EGAT and effectively implement such programs.
 19. (i) Submit all technical specifications, all drawings and data sheets to EGAT for review and comment pursuant to the Contract hereof.
 - (ii) If EGAT comment that any of the foregoing may not comply with the requirements of the Contract, the Contractor shall take reasonable steps to demonstrate to EGAT that the forgoing does comply or shall amend and resubmit the relevant documents for EGAT's review and comment.

- (iii) The Contractor shall cooperate with EGAT in the review of design documents, the conduct of inspections and the Performance Tests and other matters hereunder relating to the Work.
20. Be responsible for all strengthening and/or damage caused to any highway, road, bridge, street furniture or other facility by reason of extraordinary or excessive traffic arising from the execution of the Work and shall pay all charges, damages, or compensation payable for, or in respect of any such traffic.
 21. Supply all consumable materials, until commercial operation date, such as electricity and water for construction and temporary work, etc.
 22. All utilities within each individual EPC construction area, utilities connection between each individual EPC construction areas, and utilities connecting between EPC work and terminal points shall be responsible by the Contractor.
 23. Supply of all tools required for operation and maintenance.
 24. All project management services necessary to ensure full conformance with this contract.

Bid Security : USD 565,400.- or THB 19,665,000.-

Eligibility of Bidders

Only proposals from Bidders as a single company or as a Joint Venture or as a Consortium of firms who satisfy the following qualifications and certify their eligibility and qualifications by submitting evidence, detailed in the following order, will be accepted:

- (a) The Bidder must be a firm, partnership or company duly organized, existing and registered under the laws of his home countries.

Joint venture or consortium of firm of the above could be admitted as Bidder.

In case of joint venture or consortium of two (2) or more firms, partnership or companies, one of their members must have been selected as a lead partner.

- (b) The Bidder shall be a purchaser of the bidding documents from EGAT. For a joint venture or a consortium, only one (1) member of the joint venture or consortium is required to purchase the bidding documents.

In the case where the Bidder is not the purchaser of the bidding documents, the purchaser shall notify EGAT of the name of the Bidder in writing prior to the bid opening time.

- (c) The Bidder, each member of joint venture or consortium in case Bidder is a joint venture or a consortium, shall be well-established and maintain a permanent place of business.
- (d) The Bidder, each member of joint venture or consortium in case Bidder is a joint venture or a consortium, has no just or proper claims pending against him with respect to breach in the performance of contract on other similar work.

- (e) The Bidder, each member of joint venture or consortium in case Bidder is a joint venture or a consortium, has no unsatisfactory performance on previous and current contract with EGAT.
- (f) The Bidder, each member of joint venture or consortium in case Bidder is a joint venture or a consortium, must have the sufficient financial capability to perform this Contract. All such evidences to be submitted shall be of his own document.
- (g) The Bidder shall propose the company(s) who has experiences in any project management works in PV power plant excluding solar PV rooftops at least one (1) project(s), which shall have total output of not less than 1 MW per plant with commercial operation in Thailand or in overseas country (not his own country).

For the Bidder who is a joint venture or consortium, at least one (1) member of the joint venture or consortium or proposed company is required to meet the above qualifications.

- (h) The Bidder shall propose Crystalline Silicon PV modules vendor/ manufacturer who has experience in designing and manufacturing of Crystalline Silicon PV modules for PV power plant, with commercial operation for not less than three (3) years at least three (3) projects, having output of each project of not less than 1.5 MWp.
- (i) The Bidder shall propose PV inverter vendor/ manufacturer who has experience in designing and manufacturing of at least twenty (20) PV inverters, having each unit output of not less than 250 kW with commercial operation for not less than one (1) year. Such PV inverters shall have the feature to allow the control of active and reactive output powers for grid support functions.
- (j) The Bidder shall propose vendor/ manufacturer of Lithium-ion Battery for Battery Energy Storage System (BESS) who has experience in designing and manufacturing of Lithium-ion Battery for BESS at least three (3) projects. Each such project shall have total output of not less than 1 MWh with at least one (1) year commercial operation.
- (k) The Bidder shall propose vendor/ manufacturer of Power Conversion System (PCS) for BESS who has experience in designing and manufacturing of Power Conversion System (PCS) for BESS, having total installed capacity of not less than 4 MW with commercial operation for not less than one (1) year.

Such evidences under item (h), (i), (j) and (k) shall only be of the relevant proposed vendor/ manufacturer's experience.

Experience record under item (g), (h), (i), (j) and (k) of the Bidder derived from being a member of other joint venture or consortium in previous project(s) is acceptable

For the Bidder or the vendor/ manufacturer or the proposed company(s) under item (c), (g), (h), (i), (j) and (k) who

- (a) consolidates or merges with or acquires other firm or company or business units of other firm or company before submitting the bid, or
- (b) is formed by consolidating or merging firms or companies or business units of firms or companies before submitting the bid,

the experience records of each such firm or company can be accepted as the experience records of the Bidder or the vendor/ manufacturer or the proposed company(s) under item (c), (g), (h), (i), (j) and (k).

In addition, the pending claims of any former company shall be considered the claim of the new company. The formation of the new company does not construe that the new company is released from any liability for such claims.

- (l) The Bidder shall not be a Jointly Interested Bidder with other Bidders as from the date of EGAT 's issuance of the Invitation for Bid or shall not be a person who undertakes any action as an "Obstruction of Fair Price Competition" described in Article 1.1 of Additional Regulation attached to this Section.
- (m) The Bidder shall not be named in the list of work abandoners published by the Office of the Prime Minister, and/or in the debarment list and/or the list of work abandoners declared by EGAT according to Article 5 of Additional Regulation attached to this Section.
- (n) The Bidder shall not have EGAT's personnel involve in his business as shareholder having voting right that can control his business, director, manager, officer, employee, agent, or consultant except for the ones who are officially ordered by EGAT to act or participate therein.
- (o) The Bidder shall not be a person who is privileged or protected not to be taken any legal proceeding under Thai Court; provided that such Bidder's government declares that such special privilege is waived.
- (p) The Bidder shall not be EGAT's consultant or involve in EGAT's consultancy under this Invitation for Bids.
- (q) The Bidder shall neither fail to submit the revenue and expense accounts nor fail to present proper and complete accounts to the Revenue Department of Thailand, in accordance with the Notification of the National Anti- Corruption Commission Concerning Principles and Methods of Preparing Revenue and Expense Accounts of Project between individual/ Company and Government Agencies B.E. 2554 (A.D. 2011) as amended from time to time ("the Notification").
- (r) The Bidder shall register for e-Government Procurement (e-GP) at Thai Government Procurement website (www.gprocurement.go.th at telephone No. 662 1277386-89) of the Comptroller General's Department of Thailand.

Due to the fact that the e-GP system is not ready for registration for foreign bidders who have no taxpayer identification number at this moment, foreign bidders are, therefore, temporarily released from this qualification. However, whenever the e-GP system is ready, all foreign bidders shall register in the e-GP system.

The Bidder shall submit complete evidences of the qualifications mentioned above in item (l), (m), (n) as detailed in Additional Regulation attached to this Section.

All experience and qualifications to be submitted under this bid shall not be later than the Technical bid opening date.

Bidders are advised that noncompliance with the above requirements of this Clause shall be

cause for rejection of proposals. In this regard, only information provided with the proposal will be considered. However, the information submitted to EGAT after Technical bid opening date shall not be considered unless it is requested by the Chairman of the Bid Evaluating Committee.

The following shall also be taken into account in determining the Bidder's eligibility:-

- Political situation in the country of the Bidder or in the country of origin of equipment and material which may obstruct the performance of the Contract.

In the event that the successful bidder is a joint venture or a consortium, EGAT requires that the parties to the joint venture and the consortium accept joint and several liabilities for all obligations under the Contract and shall carry out all the Works under such formation from the time of bidding until the fulfillment of the Contract.

Availability of Bidding Documents

Bidding documents will be available for examination of Bidder's Qualifications and for purchasing in CD-ROM during 08:00 hrs. to 15:00 hrs., Bangkok Standard Time, as from January 9, 2017 to March 9, 2017 at USD 300.- or Baht 10,000.-, non-refundable at the following address:

Power Plant Development Area Foreign Procurement Department

Foreign Supply and Procurement Division

Room No.1206, Building No. TOR 101

Electricity Generating Authority of Thailand

Bang Kruai, Nonthaburi 11130

Thailand

Facsimile No. : (662) 4336317, 4335523, 4344064

(662) 4360293

Tel. No. : (662) 4339774

For more details and downloading Request Form for purchasing Bidding documents on Web site : <http://biddingeng.egat.co.th/> or <http://bidding.egat.co.th/>

Payment can be made by a certified cheque or money order made payable to EGAT or by telegraphic transfer to EGAT's current account no.109-6-01958-2 (swift code: KRTHTHBK), Krung Thai Bank Public Company Limited, Bang Kruai Branch, Nonthaburi. All bank charges and fees incurred by the payment of bidding documents shall be under the buyer's responsibility.

Bidding documents in CD-ROM will be either airmailed or airfreighted to the buyer at EGAT's expense upon receipt of the relevant remittance. In case the buyer requires the bidding documents to be sent by Express Mail Service (EMS), the charge will be at buyer's expense.

Delivery of Bids

Bids shall be submitted at the Public Relation Hall , First Floor of Building No. TOR 031 at EGAT's Head Office, Nonthaburi during 9.00 hrs. to 10.00 hrs., Bangkok Standard Time, March 22, 2017 and will be opened publicly at 10.00 hrs.

ELECTRICITY GENERATING AUTHORITY
OF THAILAND

December 26 , 2016



(Mrs. Nainoi Kijwatworawet)

Chief, Power Plant Development Area
Foreign Procurement Department