



**United States Energy Association  
Asia EDGE (Enhancing Development and Growth through Energy) Indo-Pacific Energy Market  
Investment and Modernization  
Call for CVs – Expert Advisors for Natural Gas Transmission System Operator Framework Review and  
Capacity Building for Energy Regulatory Commission of Thailand Staff**

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**CALL FOR CVs – Expert Advisors for Transmission System Operator Framework Review and Capacity  
Building for Energy Regulatory Commission Staff**

**Closing date:** January 29<sup>th</sup>, 2021

**Implementing Organization:** United States Energy Association

**Funding Agency:** U.S. Department of State, Bureau of Energy Resources

The United States Energy Association (USEA) is inviting energy regulatory experts through this Call for CVs to submit proposals to participate in a technical assistance and capacity building project to support the Energy Regulatory Commission (ERC) of Thailand. This is an activity implemented by the United States Energy Association (USEA), funded by the U.S. Department of State, Bureau of Energy Resources (ENR).

Proposals are due by 17:00 hours EST of the closing date. Please forward your proposal in soft copy (PDF form) to Mr. Brendon Thomas, Program Coordinator, at [bthomas@usea.org](mailto:bthomas@usea.org).

As this is a U.S. Government-funded project, the Call for CVs follows all relevant federal procurement regulations and laws. All bidder details will be kept confidential.

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## **I. INTRODUCTION**

The U.S. Energy Association (USEA), headquartered in Washington, D.C., is an association of public and private energy related organizations, corporations and government agencies. USEA represents the broad interests of the U.S. energy sector by increasing the understanding of energy issues, both domestically and internationally.

Through a cooperative agreement with ENR, USEA implements the Asia EDGE Indo-Pacific Energy Market Investment and Modernization (EMIM) project to support the U.S. Government's Asia EDGE initiative. EMIM aims to strengthen the energy security of allies and partners; create open, efficient, rule-based, and transparent energy markets; improve free, fair, and reciprocal trading agreements; and to expand access to affordable and reliable energy. This activity in Southeast Asia will support the Government of Thailand.

## **II. BACKGROUND**

ERC is responsible for regulating energy industry operations in Thailand. The Energy Industry Act established the ERC in 2007 as the primary regulator of the natural gas industry, the electricity industry, and the energy network industry to ensure compliance with the objectives of the Energy Industry Act. Specifically, ERC is empowered to issue regulations, rules, announcements, criteria, procedures, and conditions in order to regulate various issues in the energy industry as prescribed by law.

Natural gas-fired generation consists of over 60% of Thailand's total electricity supply. Even though Thailand's offshore natural gas production has steadily increased, high demand growth and access to imports led the country to become a net importer of natural gas in 2000. Natural gas imports in the form of liquefied natural gas (LNG), primarily from Qatar, and pipeline gas from neighboring offshore fields in Burma (Myanmar) were an estimated 460 billion cubic feet (Bcf) in 2016. Thailand's natural gas transmission infrastructure is extensive, and the national gas pipeline system connects onshore and offshore gas fields to several gas separation plants, power plants, and hundreds of industrial users. Historically, PTT Public Company Ltd. was the sole gas supplier and importer of LNG in Thailand. However, in an effort to liberalize Thailand's gas markets, the Government of Thailand recently authorized three new corporations to supply gas and import LNG.

In order to prepare for gas market liberalization, ERC is conducting an expert review of the gas market framework, including the TSO code, with recommendations from technical experts. ERC has also requested capacity building assistance for ERC staff on implementing gas market liberalization reforms.

This Call for CVs aims to identify up to 4 experts, to each provide remote assistance to ERC management and staff under the direction of USEA. Submissions may include a single expert or multiple experts, and submissions will be accepted from both companies and individual consultants.

The expert's qualifications could include:

- Knowledge of processes for energy market liberalization
- Regulatory expertise in the natural gas sector
- Experience in the natural gas or LNG sector
- Legal expertise in the energy sector

Specific additional experience sought includes:

- Establishing or implementing organizational policies and procedures for a natural gas regulatory body
- Regional experience and/or knowledge of Thailand's energy sector
- Experience in delivering capacity building trainings or workshops

## **III. SCOPE OF WORK**

The objective of this Consultancy is to prepare ERC management and staff for natural gas market liberalization through the review of a natural gas market framework and natural gas TSO code, and provide capacity building assistance for ERC staff on implementing natural gas market liberalization reforms.

### **PROJECT TASKS AND DELIVERABLES**

At the onset of this contract the Consultant(s) will review available documentation on ERCs background, mandate, recently adopted natural gas market framework, and natural gas TSO code. The Consultant(s) will then carry out the following tasks:

## **Task 1: Review of TSO Framework and Recommendation Report for ERC**

The technical advisors are expected to support ERC through remote review of documents and virtual meetings. The technical advisors will submit regular progress reports to ERC and USEA throughout the engagement. The reports will summarize the recommendations and feedback on the TSO Framework and further steps for gas market liberalization. Technical advisors will submit a final report comprising all document reviews and TSO Framework review to USEA and ERC at the end of the project.

The TSO Framework review and support could include analysis of the following:

- Imbalance charge setting
  - Calculating marginal delivery charges
  - Balancing neutrality
- Capacity overuse charge setting
  - Calculating and assessing capacity
  - Setting penalty charges for capacity overuse
- Shrinkage gas regulation
  - Managing reduction in volume of natural gas
  - Calculating lost and unaccounted for (LUAF) gas supplies
  - Storage injection shrinkage
  - Regulating shrinkage gas resupply
- Gas dispatch regulation
  - Gas scheduling and dispatch
- Gas mixing regulation
  - Technical standards for gas mixing
- Change of gas quality in the pipelines and impacts to customers
  - Technical standards for gas quality
  - Mitigating customer impact
  - Managing hydrocarbon liquids

## **Task 2:**

The consultants, through the review of the TSO Framework and conversations with ERC staff and management, will identify key gaps for capacity building, under the direction of USEA. Capacity building activities for ERC implementing staff could include, but are not limited to:

- Best practices in gas market liberalization
  - The presentations could also identify the roles of key players in a liberalized gas market, including regulators, producers, transmission system design, transmission operators, marketers, distribution companies, and offtakers.
  - Presentations could include discussion of U.S. gas market structure including third party access to transmission, rate setting, contracting, and other price considerations.
- Technical considerations for regulators
  - Key topics in this conversation will include gas quality specifications, standardizing contracts, gas dispatch and balancing, pipeline safety, and gas trading hubs.
- The regulator's role in a competitive gas market
  - Sub-topics related to a competitive gas market could focus on the various regulatory roles required to oversee effective competitive markets, including review of proposals for new facilities and infrastructure, rate-setting, trading hub design, pipeline safety oversight, pipeline capacity services, information and price transparency, land access issues, environmental protections, and noncompliance penalty design.
- Competitive gas market policy and regulation
  - This conversation could focus on the history of natural gas policy and regulation in the U.S., including the discussion of impacts on the market during unbundling and deregulation.

#### IV. TENTATIVE SCHEDULE

Task(s)	Deliverables	Duration
1. Initial review of documentation on ERCs background, mandate, natural gas market framework	1. Initial assessment report	2 weeks
2. TSO Framework review	2. Progress report	3 weeks
3. TSO Framework review draft report with recommendations for ERC and virtual presentation to ERC staff and management	3. Draft report and virtual presentation materials	3 weeks
4. Capacity building activities and presentations for ERC staff members	3. Virtual presentations and ongoing collaboration with ERC staff	3 weeks
5. Submission of final report incorporating feedback from presentations and discussions with ERC staff	4. Final report	2 weeks

#### V. SUBMISSION CONTENT

The proposal must contain the following:

- a) A cover letter; explaining areas of expertise and work experience, as well as knowledge of Thailand's natural gas sector, if applicable
- b) A CV, including:
  - Summary of past relevant experience
  - Description of past work as it relates to the natural gas sector
  - Summary of work conducted in international markets
- c) Company/organization Data Universal Numbering System (DUNS) number and confirmation of current status in the System of Award Management (SAM); **if the submitter is an individual consultant, SAM/DUNS information is not required.**
- d) Financial proposal including submitter's proposed hourly rate for this project and any other proposed expenses broken out by the following cost categories:
  - a. Personnel (labor)
  - b. Fringe Benefits
  - c. Travel
  - d. Equipment
  - e. Supplies
  - f. Contractual
  - g. Construction
  - h. Other Direct Costs
  - i. Total Indirect Costs (overhead)

#### VI. EVALUATION CRITERIA AND CONTRACT MANAGEMENT/OVERSIGHT

Selection of an offer for subcontract award will be based on an evaluation of the technical qualifications, including prior relevant experience, as well as the proposed hourly rate. If a submitter includes multiple experts in a submission, the experts may be evaluated for selection individually. Subcontract agreement management, oversight and payment will be carried out by USEA.

## VII. QUESTIONS AND CLARIFICATIONS

For all questions and clarification requests please contact Mr. Brendon Thomas, Program Coordinator, at [bthomas@usea.org](mailto:bthomas@usea.org). Please submit questions prior to 17:00 EST January 15<sup>th</sup>, 2021. All questions and answers will be made public on the USEA website on January 18<sup>th</sup>, so that all interested parties are fully informed.

END OF CALL FOR CVs