

Request for Information

RFI-USAID Power Central Asia Activity-2023-001

POWER CENTRAL ASIA -- AMERICAN INNOVATION CENTER FOR CENTRAL ASIA

Issuance Date: December 13, 2023 at 18:00 (Almaty time)

Deadline for Receipt of Questions: December 27, 2023, at 18:00 (Almaty time)

Closing Date and Time: January 26, 2024, 18:00 (Almaty time)

Issuance of this RFI does not constitute an award commitment on the Tetra Tech ES, Inc., nor does it commit to pay for any costs incurred in preparation or submission of comments/suggestions of a proposal. Proposals are submitted at the risk of the bidders. All preparation and submission costs are at the bidder's expense.



REQUEST FOR INFORMATION (RFI)

Request for Information (RFI) No.: 154-PCA-2027-RFI-20231211

Date of Issue: December 13, 2023

Submissions Due Date: January 26, 2024

(Earlier submissions are encouraged).

RFI Name: Power Central Asia -- American Innovation Center for Central Asia

I. Background

Under USAID's Power Central Asia Activity (PCA), Tetra Tech established a virtual American Innovation Center for Central Asia (AICCA), which USAID officially launched in September 2022 at the USAID Clean Energy Forum in Almaty. The AICCA is a platform that facilitates partnerships between U.S. companies and Central Asian entities to support the region's transition to clean energy in a safe, secure, uncoerced and resilient manner. Tetra Tech seeks proposals from U.S. and Central Asian companies and institutions that meet the requirements below:

II. Objective

This Request for Information (RFI) seeks to identify U.S. and Central Asian companies and institutions for business-to-business (B2B) partnerships, sharing of information and know-how, and networking opportunities in the areas of sustainable energy technologies, business methods, and financing that can contribute to the region's transition to a clean energy future.

Submissions are requested in three areas: (1) U.S. companies and institutions interested in partnerships with specific Central Asian institutions; (2) Central Asian companies interested in partnerships with specific U.S. sustainable energy and technology companies; and (3) Central Asian education and non-government institutions interested in serving as a hub for information, education, and networking on U.S. clean energy technologies. Ideally application should demonstrate complementarity and/or synergies with existing development programs in the region.

Tetra Tech will support selected applicants with introductory workshops, capacity building, advisory and technical assistance services, preparation of concept notes and pre-feasibility studies, facilitation of investment attractions from development banks, public and private source of funding.

Respondents should provide concept notes or project proposals as described in Attachment A. Based on an evaluation of these responses, Tetra Tech may begin detailed discussions with one or more respondents.

III. Federal Acquisition Regulations (FAR)

In accordance with Federal Acquisition Regulation 15.209 (c), the following clause is incorporated by reference into this RFI: FAR 52.215-3 – REQUEST FOR INFORMATION OR SOLICITATION FOR PLANNING PURPOSES (OCT 1997).



- (a) The Government does not intend to award a contract on the basis of this solicitation or to otherwise pay for the information solicited except as an allowable cost under other contracts as provided in subsection 31.205-18, Bid and proposal costs, of the Federal Acquisition Regulation.
- (b) Although “proposal” and “offeror” are used in this Request for Information, your response will be treated as information only. It shall not be used as a proposal.
- (c) This solicitation is issued for the purpose of obtaining information from interested parties regarding the purpose and objectives for the launch of the American Innovation Center for Central Asia (AICCA) discussed below in Attachment A.

This RFI will not be construed as a commitment by Tetra Tech or USAID to award any contract or pay for any information voluntarily submitted as a result of this request. Respondents are solely responsible for bearing all expenses associated with the preparation and submission of the response to this RFI. This RFI does not restrict approaches to future Solicitations or Notices of Funding Opportunity. In accordance with FAR 15.201(e), responses to this notice are not offers or proposals and will not be accepted to form a binding contract. Further information may be requested as a result of submissions received.

IV. Questions and Clarifications

All questions or clarifications regarding this RFP must be in writing and submitted, in English and/or Russian with the RFI number to PCABids@tetrattech.com before December 27, 2023, no later than 18:00 local time in Almaty, Kazakhstan. Questions and requests for clarification, and the responses thereto, will be circulated to all RFP recipients.

Only written answers from Tetra Tech will be considered official and carry weight in the RFP process and subsequent evaluation. Any answers received outside the official channel, whether received verbally or in writing, from employees or representatives of Tetra Tech, or any other party, will not be considered official responses regarding this RFP.

V. Responses

Interested parties are requested to respond to this RFI in Microsoft Word, PDF, or other compatible formats submitted via email to PCABids@tetrattech.com with copies to Andriy.Mitskan@tetrattech.com, Oleg.Ryaskov@tetrattech.com, and Viet.Nguyen@tetrattech.com.

Please include the RFI number in the subject line of the submission email. Only responses in English will be considered. Responses are limited to eight (8) pages, 11 pt or higher Calibri font, and shall include at a minimum the following:

1. The name and address of the organization;
2. Primary point of contact, phone number and email address.
3. A statement of interest and capability of the respondent organization to participate in the activity.
4. Examples of projects the respondent has undertaken that are similar in nature or address the key areas of the draft AICCA Concept in Attachment A.
5. Proposed project activities that the respondent might consider doing under a subcontract with Tetra Tech in partnership with specific Central Asian or U.S. companies and organizations.
6. An indication of whether the respondent organization plans to allocate its own resources for implementation of the proposed concepts or projects.



Tetra Tech intends to review the responses submitted quickly, considering how each proposal would advance the goals of the AICCA. Based on its review, Tetra Tech will decide as to whether to enter into discussions with a respondent on a detailed subcontract. Subcontracts will be awarded as specific agreements when details are finalized. The RFI will remain open for six months from date of this RFI for proposal submissions and is subject to the availability of funding.

Sincerely,

A handwritten signature in black ink, appearing to read 'Viet D. Nguyen'.

Viet D. Nguyen
Sr. Contracts Manager
Tetra Tech

ATTACHMENT A
DRAFT REQUIREMENTS DESCRIPTION

I. Background: USAID's Power Central Asia Project

The U.S. Agency for International Development (USAID), together with other U.S. government agencies and Departments, are supporting the economic development of the independent states of Central Asia through a variety of mechanisms and projects. In the energy sector, USAID is funding the Power Central Asia (PCA) Activity to advance energy sector reforms, clean energy technology development and commercialization, and regional energy cooperation. Tetra Tech is USAID's implementing partner on this project.

II. Purpose: American Innovation Center for Central Asia

One initiative under the PCA is the American Innovation Center for Central Asia (AICCA). Its purpose is to serve as a platform for the development of partnerships between U.S. businesses and institutions and Central Asia Region (CAR) businesses and counterparts in innovative energy technologies that support the region's transition toward net zero goal for the electricity sector. The Central Asian countries vary considerably in the nature of their electric power systems, their plans for modernization and transition to cleaner more efficient systems, and their interests in cooperation with U.S. companies and organizations. Based on interactions with counterparts in these countries, the following areas have been identified for possible subcontract activities:

(1) Renewable energy development and integration; (2) Hydrogen development; (3) Grid efficiency and resiliency; and (4) improved commercial operation of utilities.

CAR currently relies on a mix of hydro and thermal (coal and gas) power generation but has tremendous potential for solar and wind development. The countries are interested in diversification of their generation mix and in improving transmission interconnections and trade to take advantage of their resources. The governments have made commitments to expand the role of solar and wind technologies in their systems and reduce their emissions of greenhouse gases. For example, Uzbekistan's strategy includes the development of nuclear power, while Kazakhstan is also considering a future role for nuclear, including Small Modular Reactors. The CAR countries are at an early stage of their energy transformation and U.S. companies have an opportunity to develop a presence in these markets. U.S. companies are leaders in the development of clean energy technologies, whose costs are falling rapidly. The objective of this activity is to help U.S. companies forge partnerships to introduce these innovative technologies, business methods and financing techniques. Below is a brief discussion of the four strategic objectives and opportunities for cooperation under the AICCA.

Renewable Energy Development and Integration: CAR has abundant renewable energy resources of both hydro and non-hydro resources. Countries are aiming to increase the share of renewable resources in their energy mix over the next decade (e.g. Kazakhstan 30%, Uzbekistan 25%). Major new solar and wind projects are moving ahead with both private and state-supported investment and International Financial Institution (IFI) financing. The development of increasing levels of intermittent sources presents the challenge of how to integrate them into the electricity grid while maintaining reliability. Hydro variability continues to be an issue in the region, especially for Tajikistan and the Kyrgyz Republic, increasing reliance on thermal power during the low water months. In this context, advanced storage systems like pumped hydro, battery storage, gravity energy storage, and others will play a crucial role in successful RE deployment. AICCA can support activities that help CAR companies and institutions to assess, design and adopt energy storage technologies and outline proper investment strategies. These

will include how to increase flexibility and the technologies and the costs/ benefits of energy storage investments.

Hydrogen Development: With Central Asia's large renewable energy potential and natural gas production in the region is beginning to look at hydrogen development, both green hydrogen from solar, wind hydro, and potentially nuclear, and blue hydrogen from natural gas. Although the region has a relatively small capacity for gas power plants, this has been growing and the region has an existing gas pipeline system. Major investments in electrolyzers, technologies for converting natural gas power plants to a hydrogen mix, and transportation and pipeline technologies are ramping up around the world and costs are expected to drop. U.S. companies and utilities are leaders in this area and the U.S. Department of Energy (DOE) has set a goal of reducing the cost of clean hydrogen by 80% to \$1 per kilogram in a decade (specifically, Hydrogen Shot). The DOE is entering into agreements for international cooperation in hydrogen. This activity can support CAR countries' efforts to develop viable hydrogen strategies, assess technologies, understand U.S. and international hydrogen market developments, and develop human resources capacity in this field. Priority will be given to strategies that yield low-carbon outcomes, with the goal of ending international financing of carbon-intensive fossil-fuel based energy.

Grid Efficiency and Resilience: The efficiency and reliability of the grid will be increasingly important to the energy transition in CAR. The growing impacts of climate change, e.g. on the hydrological cycle, will also play a critical role in this region, requiring measures to increase grid resilience. The increasing digitalization in the energy sector will demand new efforts in the areas of grid protection and cybersecurity. The countries' need for grid modernization and digitalization investments vary considerably and IFI and bilateral donors have supported some efforts in these areas. The AICCA activity will complement the broader PCA work by exposing CAR grid companies to the latest technologies, both hardware and software, and helping them improve their electrical system protection, control, Supervisory Control and Data Acquisition (SCADA), Wide-Area Monitoring System (WAMS) and cyber security.

Improved Commercial Operation: The power distribution systems in the region are dealing with a range of problems as they face growing electricity demands from urban and industrial development as well as the increase in distributed renewable energy systems (e.g. rooftop solar and EV connections). Losses are high in some countries and revenue collection and financial resources for modernization are limited. U.S. companies and utilities are leaders in technologies and business systems to improve metering, billing, and collections as well as two-way grid interactions at the consumer level. Partnership efforts to demonstrate hardware and software solutions to improving distribution company operations, e.g. innovative metering pilots, are a potential activity under the AICCA

With the recent passage into law of the Bipartisan Infrastructure Act and the Inflation Reduction Act, the United States is poised to make unprecedented investments in clean energy technologies. The AICCA can provide a vehicle for Central Asian governments, companies, and non-government entities to tap into the growing technological developments from these investments. In implementing AICCA, USAID and Tetra Tech work with other U.S. government departments and organizations (e.g., U.S. Department of Commerce and Foreign Commercial Service, U.S. Department of Energy, U.S. Development Finance Corporation and the U.S. Trade and Development Agency) to coordinate activities and bring to the table the various U.S. government cooperation and trade and investment tools.

III. AICCA Progress for Phase 1 (During 2021-2023)

During the period of 2021-2023, Tetra Tech efforts were focused on: (1) explaining the AICCA concept to the U.S. business and energy community; (2) soliciting ideas and proposals for collaborative activities; and (3) concluding several contracts for specific activities.



Based on responses to the RFI, Tetra Tech engaged the following partners to address strategic areas.

General Electric (GE) Digital worked with the CDC in Tashkent on developing a regional Wide-Area Management System for the Central Asia region and installing a video wall in their control center; as well as providing training to the Tajik national electricity company Barki Tajik on SCADA/EMS.

University of Delaware (UD) worked with the Tashkent State Technical University to develop a professional training course on the development of green hydrogen, which is an area the Uzbek government is expecting to grow in importance as its renewable energy potential is developed.

III. Approach for Phase 2

USAID has approved Tetra Tech's continued work to grow the AICCA initiative and build on these initial partnerships. With support from the PCA Activity, new partnerships are anticipated to be established to promote U.S. clean energy technologies.

Phase 2 will give greater attention to engaging local businesses, educational and research institutions, as well as utilities. In this RFI, USAID and Tetra Tech seek proposals from CAR businesses for specific technology partnerships with U.S. companies as well as submissions from CAR educational or research institutions interested in serving as centers for information collection and dissemination, training, and networking on U.S. energy technologies and their application in key energy project areas. Tetra Tech will continue to seek proposals from U.S. companies for innovative energy technology partnerships with local businesses and institutions. Ideally AICCA aims to support projects that will complement and leverage synergies with the existing development plans in the region.

The AICCA will continue to emphasize commercial demonstrations and pilot applications of innovative technologies (both hardware and software) and expanded commercialization of existing technologies but will not fund technology research and development activities. Upon successful application a potential bidder may expect the following support from Tetra Tech under AICCA/PCA:

- informational coverage of bidder's products/concepts to a wide target audience and stakeholders;
- support in finding technological and financial partners;
- facilitation during bi-lateral negotiations;
- comprehensive review and support in adjustment to local legal/business environment;
- support in development of initial feasibility studies/design documentation, etc;
- organization of networking events to promote U.S. clean energy technologies;
- facilitating discussions with the development banks, public and private investors which support clean energy initiatives.

As mentioned above, AICCA aims primarily on establishment of bi-lateral partnerships and early-stage project structuring/support and will not fund activities beyond feasibility studies, including research and development activities. This RFI requests that respondents submit more project specific proposals for collaboration between specific U.S. and CAR institutions consistent with the four strategic areas of the AICCA. Below are the details on the three specific target groups and RFI request areas.

IV. Request for Submissions from three main groups of companies:

This RFI solicits proposals from three groups of companies and organizations in both the United States and Central Asia.

- (1) U.S. companies with innovation energy technologies that wish to engage or increase their involvement in the CAR countries.
- (2) CAR companies that are interested in cooperation with specific U.S. companies.



- (3) CAR institutions that are interested in serving as a clean energy technology information, training, and networking hub for AICCA.

IV. Request #1: Submissions from U.S. Companies

Requested Proposal Content: The respondent should describe the proposed project activity, including its purpose, location, duration, estimated costs, expected results and impacts, and the company's experience and capabilities in implementing the technology. Applications should demonstrate synergies, resource leveraging, and complementarity with other relevant development programs in our region.

Eligibility: U.S.-based companies are eligible to respond. U.S. companies can propose to provide labor from overseas offices, but equipment and software should be produced and/or shipped from the United States.

Types of Activities: Activities under this mechanism may include the following: pilot projects or demonstrations; training and professional development in innovative clean energy technologies and related digital areas; technology assessments; and specific project technical design work.

Local Counterpart: U.S. companies will partner with local companies in either the private or public sector.

Estimated AICCA/PCA Support: The range of expected from \$50K to \$250k.

V. Request #2: Submissions from CAR Companies:

Requested Proposal Content: This mechanism requests proposals from local private or public companies in CAR for collaborative energy technology activities with specified US companies. If local businesses are interested in a particular area, Tetra Tech and the U.S. Embassy can help identify potential US companies for them to contact about partnering. The proposal should describe the purpose, location, duration, estimated costs, expected results and impacts, and the company's prior experience and capabilities in implementing this or similar technologies. Applications should demonstrate synergies, resource leveraging, and complementarity with other relevant development programs in our region.

Eligibility: The local business must be formally registered in one of the CAR countries and have demonstrated a capability and involvement in clean energy fields. Private sector is strongly encouraged to participate in the submissions. Local subsidiaries of foreign corporations are not eligible.

Types of Activities: The types of activities sought are similar to those in Request #1. The respondent should describe the proposed activity, including its purpose, location, duration, estimated costs, expected results and impacts, and the company's experience in working with foreign technology companies. Of particular interest is how the proposed collaboration will increase the company's capabilities and operations, including its potential role providing domestic components and skilled labor in clean energy projects.

US Counterpart: The proposal should identify the US company that will be a partner in the activity and what their role will be. It should identify why the local company views this company as a suitable partner.

Estimated AICCA/PCA Support: The estimated support could be up to \$250k.

VI. Request #3: Submissions from CAR Technology Information Organizations

Requested Proposal Content: This mechanism requests proposals from local education or non-governmental entities interested in becoming a focal point or hub for AICCA information development and dissemination on U.S. technology companies and innovation clean energy technologies, as well as



providing training and workshops, and carrying out outreach and networking activities to improve understanding of U.S. experience and technologies in the clean energy field. The proposal should present a business plan for development of an AICCA information hub and the capabilities and experience the organization has in clean energy technologies and information systems development and management. Applications should demonstrate synergies, resource leveraging, and complementarity with other relevant development programs in our region.

Eligibility: Eligible entities include universities, non-governmental organizations and research entities established in the CAR countries. Private sector is also strongly encouraged to participate in the submissions.

Types of Activities: Envisioned activities include the development of information systems on U.S. clean energy technologies, projects and companies; newsletters and technology briefs; workshops and study tours; and other means of exposing CAR interests to the clean energy technology work ongoing in the United States.

U.S. Counterpart: It may be useful for the local institution to propose a specific link with a U.S. clean energy information organization, e.g. a Department of Energy Laboratory or U.S. university energy program.

Estimated AICCA/PCA Support: A contract would be concluded by Tetra Tech with the local institution. The estimated size would be in the range of \$50-200K.

VII. Submission Review and Contracting Process

This RFI process is designed to be an open, rolling process, with submissions considered as they are received. Tetra Tech will review and evaluate submissions in each of the three areas and make a determination as to whether to proceed to discussions with the respondent on a detailed proposal and budget leading to a subcontract. This contract will likely be a fixed-price or time and materials type depending on the nature of the proposed activity. USAID has obligated resources to Tetra Tech to fund such contracts. Tetra Tech seeks to make decisions quickly on submissions and encourages respondents to submit RFI responses as soon as possible.

Key criteria and considerations in evaluating the submissions, depending on the Request #, may include:

- (1) How does it further the strategic objectives of AICCA?
- (2) Does it have a significant technological innovation dimension?
- (3) For Request #1: is the proposer a U.S.-based company with the capabilities to carry out the activity?
- (4) For Request #2: is the proposer an established, indigenous CAR company and not a subsidiary of a foreign country?
- (5) For Request #3: is the proposer an educational or non-governmental organization with the capabilities to serve as an information and networking hub?
- (6) Does it include a U.S.-developed technology and does the proposed activity involve demonstration or commercialization of the technology?
- (7) Does the proposed activity appear to be feasible to implement within the timeline and financial resources of PCA?
- (8) Does the application demonstrate synergies, resource leveraging, and complementarity with other relevant development programs in the region?
- (9) Is the counterpart (either local or U.S.) clearly identified and its role and contribution specified?
- (10) Will the activity be implemented by companies or organizations other than the submitter and the counterpart organization?



- (11) Is there a good potential for follow-on private and IFI investment, replicability and scaling-up of the activity, including in other CAR countries?
- (12) Does it envision and support regional or bilateral cooperation between and among CAR countries?
- (13) Does the submission include plans and funding for implementation of the proposed concepts and projects by the parties?

VIII. Mandatory Factors for Proposals

Respondents are also requested to take into account the following factors applicable to USAID projects in considering activities under potential subcontracts and partnerships.

Environmental and Social Impact Due Diligence: A subcontractor is required to adhere to the requirements of the Federal Regulations (22 CFR 216) and ADS Part 201 and 204, which in part, require that the potential environment impacts of USAID-financed activities are identified prior to a final decision to proceed, and that appropriate environmental safeguards are adopted for all activities. Subcontracts will define the necessary environmental and social due diligence required based on the type of activity to be undertaken.

Gender Equality: The goal of the USAID policy on Gender Equality and Female Empowerment is the advancement of gender equality and empowerment of women and girls to participate fully in and benefit from development. Gender equality in the workforce means women and men having equal opportunities to choose an occupation, develop requisite skills and knowledge, be fairly paid, enjoy equal treatment, and advance in a career. Subcontracts will indicate how the planned activity will contribute to these objectives.

Inclusive Development: USAID funds will be used to create opportunities for everyone to contribute and benefit from its projects regardless of age, sex, ethnic origin, health status, family structure, sexual orientation, education, employment, income, housing, food security, safety or any other dimensions of human diversity. Proposed subcontract activities will seek to be inclusive and address the above concerns. SMEs, startups, and minority owned businesses are encouraged to participate in the AICCA initiative.

Sustainability: The sustainability of the provided assistance must be considered during its design and execution and will naturally depend on the specifics of the activity. The subcontracts will provide for involvement of stakeholders and local experts and seek to ensure appropriate capacity building in implementation.

IX. Monitoring, Evaluation, and Learning

Tetra Tech will work closely with the subcontractor to develop a Monitoring, Evaluation and Learning plan that meets USAID's requirements under the Power Central Asia Activity. The subcontractor will be expected to establish baseline data, report on performance toward achieving the outputs and results of the subcontract, cooperate with USAID evaluations if undertaken, and inform Tetra Tech of any suggested changes in design and management as project implementation proceeds.

X. Place of Performance

The place of performance will be in the five Central Asia countries of Kazakhstan, Uzbekistan, Kyrgyz Republic, Tajikistan, and Turkmenistan. Applicants from all five countries are strongly encouraged to apply and propose activities under this RFI.