

The Afghanistan Engineering Support Program assembled this quarterly report. It is an approved, official USAID document. Budget information contained herein is for illustrative purposes. All policy, personal, financial, and procurement sensitive information has been removed. Additional information on the report can be obtained from Firouz Rooyani, Tetra Tech Sr. VP International Operations, (703) 387-2151.



**USAID**  
FROM THE AMERICAN PEOPLE

**AFGHANISTAN**

# ENGINEERING SUPPORT PROGRAM

Contract No. EDH-I-00-08-00027-00

Task Order No. 1

Second Quarter Report 2014

November 10, 2014

This publication was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech, Inc.

**This report was prepared for the United States Agency for International Development, Contract No. EDH-I-00-08-00027-00, Task Order 01, Afghanistan Engineering Support Program.**

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Chief of Party  
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November 10, 2014

[REDACTED]  
[REDACTED]  
Office of Economic Growth and Infrastructure (OEGI)  
U.S. Agency for International Development  
Great Massoud Road  
Kabul, Afghanistan

**Re: Contract No. EDH-I-00-08-00027-00/Task Order No. 1  
Afghanistan Engineering Support Program (AESP)**

**Second Quarter Report FY2014**

Dear [REDACTED]

It is with great pleasure that Tetra Tech submits this Second Quarter Report for fiscal year 2014, as provided in section C.5, "Deliverables," paragraph D of the above referenced Task Order. This report presents the activities for the period of January 1, 2014 through March 31, 2014.

We look forward to continuing our of the USAID OEGI mission during 2014 and to strengthen our partnership while building a brighter future for Afghanistan.

Please contact me at your convenience should you have any questions or comments regarding this report.

Respectfully,  
Tetra Tech, Inc.

[REDACTED]

[REDACTED]  
Chief of Party (AESP)

# AFGHANISTAN ENGINEERING SUPPORT PROGRAM

Contract No. EDH-I-00-08-00027-00  
Task Order No. 1

Second Quarter Report FY2014

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## **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

## PROJECT OVERVIEW

The Tetra Tech (Tt) Afghanistan Engineering Support Program (AESP) provides planning, design, engineering and technical oversight support while contributing to local national capacity building, mentoring, and collaboration/coordination with the United States Agency for International Development (USAID) Afghanistan Office of Economic Growth and Infrastructure (OEGI). Tt AESP performs activities that complement and reinforce the activities and engineering expertise of USAID OEGI staff in energy, transportation, vertical structures, and water and sanitation sectors. Tt AESP consists of a Kabul-based core of expatriate engineering professionals leading a competent staff of local Afghan engineers and support professionals, with home office, or “reachback”, support from highly-qualified US-based staff. Our local team continues to display adaptability, mobility, and responsiveness to the needs of USAID.

- Activity Start Date: November 9, 2009
- Activity End Date: November 8, 2014
- Prime Implementing Partner: Tetra Tech
- Sub-contractors/Sub-awardees: Power Engineers, USACC
- Geographic Coverage: Afghanistan, See Figure 1 below

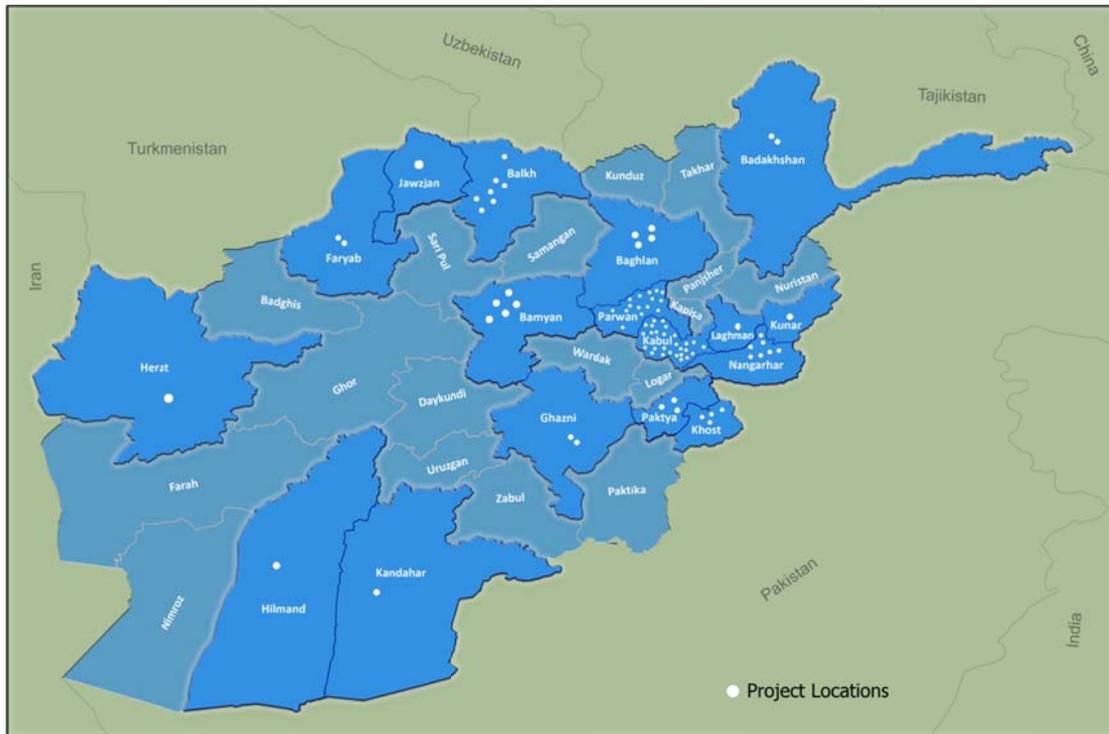


Figure 1: 2009 – 2014 Tt AESP Project Locations

## EXECUTIVE SUMMARY

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This report covers the period from January 2014 to March 2014. Tt AESP submitted 75 deliverables in Year 5, Quarter 2 ranging from the final deliverables for WO-LT-0063 AMD 4 and AMD 6 to the request for proposal (RFPs) for Task 14 on WO-LT-0059. In addition, Tetra Tech submitted three additional RFPs and is currently working towards completion of six others including three (two for pre-purchase and one for construction) on WO-LT-0063 and two for goods/pre-purchase and construction on WO-LT-0070. Total estimated project value for all RFPs is [REDACTED] [REDACTED]. Lastly, Tt AESP has completed two technical specifications for commercialization this quarter. They were for WO-LT-0059 AMD 1, AMD 2 and Task #14.

Highlights of the quarter within each sector and the technical support and oversight services noted below exemplify AESP's diverse support of the USAID OEGI mission here in Afghanistan.

### Summary of Results for the Reporting Period and Key Accomplishments

#### Energy Sector

Afghanistan Northeast Power System (NEPS) Protective Relay and Coordination studies (WO-LT-0059) involved working closely with the Da Afghanistan Breshna Sherkat (DABS) relay department to conduct extensive field inspections and collect relay settings from the medium voltage electric power distribution system in Kabul. Tt AESP modeled all 71 medium voltage feeders comprising the Kabul Distribution System and continues to work on Task 14 to develop protective settings for all substation relays in Kabul. The RFP for this work is in final review and will be submitted in Quarter 3. USAID also requested that Tt AESP upgrade the medium voltage distribution feeders with DABS and develop a NEPS distribution materials and installation specifications development report for 10 feeders including drawings and specification for distribution materials for procurement. A second amendment is also underway for an additional 61 feeders for a total of 71.

The Salang Tunnel Technical Sections (WO-LT-0063) currently has six approved amendments. Under AMD 6, Tt AESP submitted the final detailed design, including plans and specifications for the Salang Tunnel Substation. Tt AESP submitted the RFP for Amendment 4 (Salang Tunnel Pre-Purchase Equipment Specification) to DABS through USAID on January 9, 2014. All bids were to be submitted to DABS by March 5, 2014. Currently Tt AESP is assisting DABS in the technical bid evaluations, which will continue into Quarter 3. Two additional RFPs will be submitted, including the pre-purchased parts and design package.

Tt AESP continues to make progress on WO-LT-0072 "Power System Analysis of Proposed NEPS Improvements", by coordinating with the key donor agencies and others contributing to improving the energy sector within Afghanistan. Tt AESP submitted the study plan and review is ongoing. We continue to coordinate with all the key donors and watch for opportunities to assist, such as the possibility to explore the gas reserves potential at Sherbergan province.

During this quarter, members of the Tt AESP team were deployed to perform troubleshooting activities at the Tarakhil Thermal Power Plant (WO-LT-0070). Within two weeks of being in country, the Tt AESP team re-started the Power Block "B" engines which had not been operational for over nine months. Currently all six engines are powered.

#### Technical Support and Oversight

Acting in the capacity of technical advisors, Tt AESP was able to use its freedom of mobility to assist USAID with field observations for the Regional Command North Project Evaluations/Regional Command East Project (WO-LT-0009, AMD 5 and 6). During this quarter, 20 site visits were completed under AMD 5 and 5 site visits were completed under AMD 6. We feel this work order has greatly increased the capacity of the project inspector and engineering staff, including receiving an effective writing presentation by the MIS Manager at the Tt Villa.

Under the Afghan Woman Internship Program (WO-LT-0042), Tt AESP has completed two successful years of the program, and this quarter marks the beginning of our third year. Tt AESP interviewed 10 candidates for the four internship positions. The four selected women began work in mid-January. During Quarter 2 of Year 5, the interns began shadowing USAID engineers. On February 12 the interns shadowed [REDACTED] (Work Order POC), [REDACTED], [REDACTED] and [REDACTED]. The interns also began work on their resumes, interview preparation, and presentation work. They attended a presentation on the Kajaki Dam project initiated by IRD, and an OEGI staff meeting where one of the interns gave a presentation about the internship program. In addition, two interns attended Woman's International Day on March 8, 2014. Through the internship program two of our second year interns had opportunities to provide leadership skills. [REDACTED], who is a second year intern, stepped into a management role for the internship project when an expat was demobilized. Another intern, [REDACTED] was hired by IRD to support the Kajaki Dam project.

In addition to the training and mentorship provided to the Tt AESP interns under WO-LT-0066, Training and Support, Tt AESP has funded 11 memberships with the Professional Management Institute and 1 exam fee. We remain committed to working with other participants through funding memberships and exam fees.

### **Transportation**

Tt AESP provided guidance to Mashriq Engineering Construction Company (MECC) on project scheduling efforts on the Gardez-Khost Road construction and teamed with USAID OEGI to mentor MECC staff using Primavera P6 scheduling software. Tt AESP has reviewed and finalized 144 as-built drawings so the roads can be turned over to the Ministry of Public Works.

Upon request from USAID, Tt AESP has designed a three span bridge to replace a damaged bridge on GK Road as part of WO-LT-0077. The final design for Bridge #9 was submitted to USAID on March 31, 2014.

### **Vertical Structures**

Tt AESP didn't have any active work orders in the vertical structures sector this quarter.

As described above, Tt AESP provided USAID OEGI with diverse engineering expertise and dynamic support throughout the second quarter of Year 5. The versatility of the Tt AESP program is evident in the variety of deliverables submitted to USAID OEGI and the program's support for a wide spectrum of USAID goals and objectives. Tt AESP will continue to remain flexible and mobile in FY 2014 to support work orders issued by USAID OEGI and provide program support for capacity building and gender equality in Afghanistan.

### **Constraints and Critical Issues**

During this quarter, Tetra Tech noted that the format used by the local national field staff to document site visits was inconsistent and difficult to read in places. In response, Tetra Tech created a program in which the local national staff were instructed how to write a standardized field report. Topics included formatting, use of photographs, caption selection, critical thinking and standard report organization

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## 1.0 ACTIVITY IMPLEMENTATION

### 1.1 KEY ACTIVITIES ACCOMPLISHED DURING THE QUARTER

Tt AESP is responsible for identifying, planning, designing and providing technical support and oversight of USAID OEGI infrastructure projects and related engineering activities, in accordance with the basic USAID OEGI Architect and Engineer (A&E) IQC contract. Work orders fall into one of two categories; administrative or long-term. Administrative work orders are defined as tasks requiring a total level of effort less than or equal to 18 business days (144 work hours). Long-term work orders defined as activities requiring a total LOE exceeding 18 business days.

Tt AESP supports USAID OEGI's mission throughout Afghanistan using both types of work orders. For tracking purposes, work orders are broken into one of the following sectors: Energy, Vertical Structures, Transportation, Water and Sanitation as stated in the Tt AESP contract if the work requested falls outside the sectors above, it falls under technical services. Out of the five identified categories, the majority of Tt AESP work this quarter supported the energy sector.

Table 1 below describes the work order activities performed during the second quarter.

Table 1: Summary of Work Completed During Second Quarter

Number	Work Order Title	Summary of Work Completed
WOLT0042	Afghan Women Internship Program	Final Report
WO-LT0059 AMD 1 & 2	NEPS Distribution Materials and Installation Specification Development	Installation Guides - Multiple Reports
WO-LT0063 AMD 4	Salang Tunnel SS Technical	Detailed Design and Specifications
WO-LT0064	Sheik Misri to Rodat T/L and SS	Concept Drawings
WO-LT0070	Tarakhil Power Plant	Final Design Drawings and Specifications
WO-LT0077	Gardez-Khost Bridges #9 and #10	Bridge #9 BoQ and Design Analysis Drawings, Topographic Survey, Geo-technical Report

### 1.2 KEY ACTIVITIES PLANNED FOR NEXT REPORTING PERIOD

Table 2 below describes the activities planned for the third quarter.

Table 2: Summary of Work Planned for Third Quarter

Number	Work Order Title	Summary of Work Planned
WO-A-0097	Deh-Asuda Check Dam	Tt AESP to provide a review of the Deh-Asuda Check Dam construction documents prepared by KFZ-IRD.
WO-A-0098	Kabul Basin Aquifer Feasibility Study	Tt to begin preliminary work on the Kabul Basin Aquifer Recharge feasibility Study.
WO-LT-0009	Parun Road Field Support	Tt to provide project evaluation and supervision services in connection with

Number	Work Order Title	Summary of Work Planned
AMD 7		the Parun Road construction in Nuristan Province.
WO-LT-0042	Afghan Women Internship Program	Four interns from Kabul University and Polytechnic University will participate in training, shadowing events and meetings. Interns will create and perform presentations for OEGI staff meetings at the US Embassy
WO-LT-0048 AMD 4	Qarabagh to Kandahar East Substations	Tt AESP will create and deliver a technical section (Volume 2) for a 220kV transmission line and substations from Qarabagh to Kandahar East, which include; Qarabagh, Gelan (Moqor), Shah Joy, Qalat and Kandahar East. The work to be completed will be similar to the support provided under Amendment 3..
WO-LT-0048 AMD 5	Transmission Lines from Ghazni to Kandahar East	Previously, Tt AESP was asked to create a SOW and ROM development will continue for technical section (Volume 2).
WO-LT-0048 AMD 6	RPC At Kabul and Kandahar East	TT AESP to provide a SOW and ROM to provide engineering support to the further build out of the 220kV Northeast Power System (NEPS) to the Kandahar East electrical power distribution system (part of the Southeast Power System or SEPS)..
WO-LT-0059 AMD 1	NEPS Distribution Materials and Installation Specification Development	AESP to perform a follow-on investigation as a result of the investigation and analyses completed under WO-LT-0059 Relay Coordination Study.
WO-LT-0059 AMD 2	NEPS Distribution Materials and Installation Specification Development	USAID OEGI requested a SOW and ROM to create field installation guides for the remaining 61 MV feeders identified under WO-LT-0059 Relay Coordination Study.
WO-LT-0059 AMD 3	NEPS Kabul Area Substation Assessments	Tt AESP to provide a SOW and ROM to provide further assessments of Kabul North, Northwest, and MW Radio Substations to identify other deficiencies beyond protective relay coordination scope of WO-LT-0059 Task 14.
WO-LT-0063 AMD 4	Salang Tunnel SS Pre-purchase Specs	Tt AESP to develop performance specifications for long lead high voltage (HV) substation equipment, MV equipment and relay/control equipment
WO-LT-0063 AMD 6	Salang Tunnel SS Detailed Design	Possible revisions to the detailed design package submitted on 03/18/2014

## 1.3 LESSONS LEARNED

### 1.3.1 Evaluations/Assessments/Audits

The USAID Financial Audit which began during the last quarter of FY 2013, was finalized during the second quarter. The summary of report findings, Tetra Tech responses and planned actions are described in Table 3 below.

Table 3: Audit Summary

Number	Finding	Tt Response	Action
1	Base salaries of expatriates were charged to project before the approval of Contracting Officer.	Tetra Tech is obtaining, and will obtain in the future, prior written approval from USAID Contracting Officer.	Since this occurrence during year 1 of the project, Tetra Tech has taken the steps necessary to ensure no employee charges to the contract without receiving prior written approval from USAID. To date, 48 expat staff has worked on the AESP project and since July 21, 2010 not a single instance of an employee charging to the project without prior approval has occurred.
2	Log book for generators fuel consumption was not maintained.	Although a log book is not required by the AIDAR or FAR or by the Prime Contract's or Task Order's terms and conditions, Tetra Tech will maintain a formal log book if directed by the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	On AESP, our routine management controls and targeted record keeping results in an accurate accounting of diesel fuel cost without incurring the cost of maintaining a logbook of generator diesel fuel consumption.
3	Time In & Time Out record of subcontractors' labor was not maintained	Tetra Tech will maintain a record of Time In and Time Out of subcontractor labor hours in compliance with the direction of the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	Tetra Tech's time keeping policies are in accordance with commonly used practices in similar organizations; is in compliance with the US Defense Contract Audit Agency (DCAA); and subcontractors' employees pay is set according to a daily pay rate rather than hourly.
4	Daily time keeping record of subcontractors' employees were not approved by the Chief of Party	Tetra Tech will maintain Chief of Party approved daily time keeping records of subcontractor employees in compliance with the direction of the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	As described above, Tetra Tech and its subcontractors do comply with the subcontract clause 3.5 of Part 3 of the subcontract between Tetra Tech and its subcontractors. The Chief of Party will continue to review and approve all subcontractor invoices in the Kabul office that contain costs incurred from subcontractor employee timesheets.

Number	Finding	Tt Response	Action
5	Performance reports were not attached/prepared for the contracts of more than US \$30,000	Tetra Tech will complete performance reports on subcontracts of more than \$30,000 in compliance with the direction of the Contracting Officer. If needed, Tetra Tech will request prior approval from the Contracting Officer to incur additional cost and fee for implementation.	Tetra Tech has completed Performance Reports on subcontracts of more than \$30,000 where there is no other separate quality assurance / quality control process for A-E services deliverables.
6	Invoices were not approved by the Chief of Party	Tetra Tech will have subcontractor invoices approved by the Chief of Party in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	
7	Delivery receipts for the vehicles purchased were not prepared / attached	Tetra Tech will provide delivery receipts for vehicles purchased in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	
8	Sound commercial practices including competition not used for the selection and evaluation of subcontractors	Tetra Tech will continue to follow sound commercial practices in the selection and award of subcontractors in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer. Tetra Tech will request that the Contracting Officer place written Consent to Subcontract statements and list our named teaming partners / subcontractors in the text of the Task Orders issued by USAID.	
9	Excluded Parties List System (EPLS) review conducted after award of contract to Subcontractors	Tetra Tech will ensure that EPLS review will be performed in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	Additional training of the AESP project office CCN Procurement staff in procurement and contract compliance practices has been implemented, along with enhanced periodic quality assurance reviews of all procurement and subcontract management files. Such training will be standard operating practice on all future USAID task orders.

Number	Finding	Tt Response	Action
10	Information about subcontracts and sub awards greater than US\$25,000 were not available publicly on the Federal Sub award Reporting System (FSRS)	Tetra Tech will ensure that all FSRS information is reported in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer once USAID has enabled Task Order 01, and any future Task Orders issued, in FFATA.	Tetra Tech has been in discussions with the AESP COR and CO regarding the inputting of the FFATA data for Task Order 01. As of the date of this submission to USAID, USAID has not enabled Task Order 01 in the FFATA reporting system and, as a result, Tetra Tech cannot enter any data required by FFATA even if FFATA subsequently had been added to the Contract by formal amendment.
11	Specially Designated National (SDN) list review was not conducted	Tetra Tech will ensure that all SDN list reviews will be conducted in compliance with the requirements of the Federal Acquisition Regulations, AIDARs, Prime Contract, Task Order, and direction of the Contracting Officer.	Additional training of the AESP project office CCN Procurement staff in procurement and contract compliance practices has been implemented, along with enhanced periodic quality assurance reviews of all procurement and subcontract management files. Such training will be standard operating practice on all future USAID task orders.

## 2.0 COLLABORATION WITH GIROA, OTHER DONORS, OR OTHER USAID PROJECTS

### 2.1 LINKS WITH RELEVANT GIROA MINISTRIES

Tt AESP collaborated with DABS on numerous projects including the manufacturing facility assessments and the Tarakhil Thermal Power Plant Links with Other USAID Projects.

## 3.0 MANAGEMENT AND ADMINISTRATIVE ISSUES

### 3.1 PERSONNEL

Tetra Tech had one noteworthy personnel change during the second quarter. Our Deputy Chief of Party (DCOP) received his special immigration visa and departed for the United States. After his exit, Tetra Tech promoted the local national Technical Services Manager to DCOP demonstrating our commitment to USAID FORWARD.

### 3.2 ADAPTATION OF THE ACTIVITY

Due to the fluid and serious nature of security issues encountered during the execution of this contract, Tetra Tech has remained extremely flexible to allow project strategic elements to be modified and or re-prioritized as the situation dictates.

### 3.3 MODIFICATIONS AND AMENDMENTS

Modification 21 was received on February 11, 2014. The purpose of this modification was to:

1. Rescind the Approval of Contractor Purchasing System for TO# EDH-I-00-08-00027-00 of the Global Architect-Engineer Infrastructure Services (A&E) IQC; and
2. Incorporate the FAR clause “52.244-2 Subcontracts” in section I of the Task Order.

## **4.0 SUCCESS STORIES**

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No separate documentation of the successes during Q2 was created.

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