



USAID
FROM THE AMERICAN PEOPLE

AFGHANISTAN

SHEBERGHAN GAS GENERATION ACTIVITY (SGGA)

Contract No. EPP-I-00-03-00004-00, Task Order No. AID-306-TO-12-00002

Monthly Report

Period: March 1 – March 31, 2012

Prepared by:

Advanced Engineering Associates International, Inc. (AEAI)/SGGA Project Team
1707 L Street, NW, Suite 1030, Washington, DC (USA) 20036
Telephone: 1-202-263-0601

This Monthly Report is made possible by support from the American People jointly sponsored by United States Agency for International Development (USAID) and the Government of the Islamic Republic of Afghanistan. The contents of this Monthly Report were prepared by Advanced Engineering Associates International, Inc. and are the sole responsibility of Advanced Engineering Associates International, Inc. and do not necessarily reflect the views of USAID or the United States Government.

Table of Contents

1	SECTION I.....	1
1.1	Sheberghan Working Group Meeting.....	1
2	SECTION II.....	1
2.1	March Activities.....	1
2.2	Meetings with DABS.....	2
2.3	Meetings with OPIC.....	3
3	SECTION III.....	3
3.1	Next Steps.....	3
4	SECTION IV.....	4
4.1	Potential Problems Identified.....	4
ANNEX 1	.....	5
	Action Items.....	5
	Outstanding Critical Issues.....	5
	Suggested Items.....	5
	SWG Decisions/Agreements.....	5
	Additions to the Risk/Issues Matrix and/or Financial Estimates.....	5
	Discussion Summary.....	5
ANNEX 2	.....	10
ANNEX 3	.....	11
ANNEX 4	.....	13
ANNEX 5	.....	15

Acronyms and Abbreviations

ADB	Asian Development Bank
AEAI	Advanced Engineering Associates International Inc.
AGE	Afghan Gas Enterprise
COO	Chief Operating Officer
COP	Chief of Party
DABS	Da Afghanistan Breshna Sherkat
EIA	Environmental Impact Assessments
GIRoA	Government Islamic Republic of Afghanistan
GSA	General Services Administration
IL	Implementation Letter
IMF	International Monetary Fund
IPP	Independent Power Plant
IPS	Industrial Promotion Services
Kv	Kilowatt
kWh	Kilowatt Hour
MEW	Ministry of Energy and Water
MMCMD	Million Cubic Meter per Day
MoC	Memorandum of Collaboration
MoE	Ministry of Economy
MoF	Ministry of Finance
MoM	Ministry of Mines
MW	Migawatt
NEPS	North East Power System
OAPA	Office of Afghanistan and Pakistan Affairs
OIEE	Office of Infrastructure Engineering and Energy
OPIC	Overseas Private Investment Corporation
PDIL	Projects and Development India Limited
PMC	Program Manager/Coordinator
PPA	Public Private Alliance
SGDP	Sheberghan Gas Development Project
SGPP	Sheberghan Gas to Power Program
SLD	Single Line Diagram
SMG	Sheberghan Management Group
SOW	Scope of Work
SWG	Sheberghan Working Group
TAPI	Turkmenistan-Afghanistan-Pakistan-India
TFBSO	Task Force for Business and Stability Operations
TOR	Term of Reference
UK	United Kindom
UMoC	Updated Memorandum of Collaboration
USAID	United States Agency for International Development
USG	United States Government
WB	World Bank

1 SECTION I

1.1 Sheberghan Working Group Meeting

A limited-participation Sheberghan Working Group (SWG Lite) meeting was held on March 13, 2012 at USAID/Kabul. Meeting Minutes, including the list of invitees/participants, are attached as Annex 1.

2 SECTION II

2.1 March Activities

Status (as of March 31, 2012) of Action Items Resulting from SWG Meetings

- Implementation Letter (IL) --USAID will work with GIRoA agencies to execute the IL-- prerequisite to the on-budget funding provided by USAID for the implementation of the gas well drilling and the gas processing plant – The IL was sent to MoM and MoF on March 27, 2012 and is currently being reviewed by MoM and MoF
- Memorandum of Collaboration (MoC)--USAID will endeavor to have all parties sign an updated MoC when the Implementation Letter is signed. – The original MoC was only partially executed on September 22, 2011; USAID intends to meet with GIRoA stakeholders to discuss the current configuration of the Program, introduce the PMC and inform GIRoA about the intent to get all of the stakeholders to sign the Updated MoC in a public ceremony.
- Transaction Advisers --USAID and the State Department will continue consultations with TFBSO on providing transaction advisers to the Ministry of Mines (MoM) and DABS. – OPIC has shared the TOR for the transaction advisors with TFBSO and TFBSO has agreed, in principle, to fund the initial phase (perhaps the first year) of this technical assistance through their current contractor providing legal services to the MoM. TFBSO hopes to have the transaction advisors in place sometime in near future. OPIC will follow-up with TFBSO on the hiring of Transaction Advisors.
- The Gerquduq Soviet-built gas processing plant-- AEAI, the Program Manager/Coordinator (PMC) will review the viability of rehabilitating/restarting the Gerquduq Soviet-built gas processing plant to process gas from the Juma and Bashikurd fields and, if deemed viable, develop an approach to establishing cost and feasibility of including this effort in the program in the interest of accelerating the supply of power plant quality gas to the IPP. – PMC seeking expert assistance to re-assess the Gerquduq gas processing plant; one hands-on gas processing expert willing to work in Afghanistan has been identified, but is currently under contract in Tanzania; this expert is well suited to take on the assessment (including dismantling of the plant and rehabilitation if deemed technically and economically viable) because he is not affiliated with a major company, thus he is in a position to manage the risk associated with this type of work; PMC is also in consultation with PDIL (UK/Pakistani) gas processing engineering and construction company; PDIL is prepared to field from their Lahore, Pakistan office five member specialist team to perform estimated 7 days at the site assessment:
 - Mechanical,
 - Instrumentation, Process/Commissioning, Construction
 - Project Management/Subcontracting
- PDIL can field the team immediately subject to housing, security and transportation being available. Estimated total cost of this field assessment is \$ (financial information omitted) as PDIL is willing to do the work at cost and their deployment is only from Lahore, Pakistan; subject to USAID approval the PMC will prepare logistics, etc. and get PDIL ready for field work starting o/a April 20 (due to forthcoming New Year holidays. Clarification required to eliminate duplication

of efforts since TFBSO indicated that they are also evaluating the viability of rehabilitating the gas

- Viability of power supply from the IPP to the Jowzjan-Balkh-Farah region--PMC will support DABS in evaluating the viability of power supply from the IPP to the Jowzjan- Balkh-Farah region via 110 kV grid in order to determine the viability of commissioning a modular power plant by the IPP starting in 2013 (assuming gas supply is available). – PMC is working closely with DABS on getting a demand forecast for the region and defining the required technical parameters. DABS provided supply/demand forecast data at the end of February but there are outstanding questions regarding data inputs, etc. Additional data gathered by PMC from various sources has to be analyzed and reviewed by DABS in order to have consistency across the data points. In the current 110 kV transmission system supplied from Turkmenistan, voltage drop exceeding 50% occurs in the course of the day. The 110 kV system can deliver a maximum of 20 MW into the region. DABS expects to review offtake options at the level of the Senior Management Group.
- Environmental Impact Assessment (EIA)--PMC will work with USAID, OPIC, ADB and the WB to develop a process for producing the required environmental impact assessments. – Draft analysis and recommended approach have been prepared and submitted to USAID for review and further discussion/development and decision on next steps The issue of World Bank's participation has to be further discussed to determine what is required in terms of EIA and also which agency will fund it. The environmental work is currently not in the SGDP scope.
- TFBSO's involvement in the Rehabilitation of the Gerquduq gas processing plant--USAID/PMC will follow-up with TFBSO on its role with regards to the rehabilitation of the Gerquduq gas processing plant. USAID is planning to discuss this issue along with the issue of funding the transaction advisors with TFBSO in Kabul sometime in early April.
- Sovereign Guarantee-- USAID Washington (OAPA) will follow-up with the World Bank and IMF on the issue of sovereign guarantee. State Department (US Embassy in Kabul) will contact the IMF representative in Kabul on this issue as well. No updates as of March 31, 2012.
- Gas Allocation--PMC will discuss with MoM the issue of gas allocation from the gas wells that are going to be rehabilitated by the ADB-funded gas-well rehabilitation project. No updates as of March 31, 2012.
- Collaboration Tool--PMC will make huddle operational before the next SWG meeting.
- The PMC has been testing huddle internally since early March As soon as issues concerning confidentiality and Huddle operations are resolved PMC is planning to go live with Huddle.

2.2 Meetings with DABS

March 10, 2012 – The PMC met with Eng. Shekeeb Nessar, COO of DABS. The purpose of the meeting was to provide an overview of the SGDP objectives and program components. The following issues were also discussed:

- Commercial and technical issues relevant to DABS
- Background on Tolling structure
- Power Purchase procedures from the IPP Gas supply and responsibilities of the parties

DABS COO agreed with SGPP goals in the context of expanding domestic power generation. He indicated that there is adequate demand in the northwestern provinces to offtake 200 MW from an IPP.

March 18, 2012 – The PMC met with Eng. Shekeeb Nessar, COO of DABS. The purpose of the meeting was to further discuss the technical and commercial issues of major importance to DABS,

- Tolling Agreement is not acceptable to DABS, since DABS does not have any experience with gas supply and DABS has lots of bad experiences with diesel fuel supply

- Power plant synchronization with any island within NEPS is a serious problem and it will take time to resolve this issue
- Domestic power generation based on indigenous primary energy sources such as natural gas is highly desirable for Afghanistan as well for DABS to enable DABS to better manage the risk of power supply from the neighboring countries and to make possible economic dispatch in the future

The COO pointed out the problems DABS is experiencing in negotiating PPAs with the neighboring countries.

March 26, 2012 – The PMC met with Khwaja Masood, Director of Planning, Said Abdul Wahid and M. Afzal, Staff of Planning and Control Department, of DABS for consultations. The purpose of the meeting was to update DABS Planning Department on the status of SGDP progress; discuss Supply/Demand Forecast for Northwestern Provinces of Afghanistan; request DABS Planning Department to review the draft presentation on Supply/Demand Forecast for Northwestern Provinces; and review newly collected field data and discuss the next steps.

2.3 Meetings with OPIC

March 8, 2012 – PMC met with OPIC in Washington, Robert Drumheller and Bill Pegues, for consultations. Topics included OPIC's concerns with regards to the transaction as well as the funding of the Transaction Advisors by TFBSO and the AEIA.

3 SECTION III

3.1 Next Steps

Completion of realignment of SOW is urgently needed to allow preparation of Workplan, realignment of deliverables, subcontracting and staffing.

Continue work with DABS on commercial and technical issues to assist them in becoming a knowledgeable partner in the SGPP; major issues: Tolling agreement, power price and grid connection for the IPP (synchronization). Continue work with MoM to prepare them for the execution of the IL and addressing the Conditions Precedent.

Continue work with MEW to enable them to become the champion of the IPP program (a single window point of contact with GIRoA); also assist MEW in managing the preparation of the Power Sector Master Plan, because the plan will have a direct impact on the IPP.

Start work with MoE to enable the Ministry to become an arbiter of interests between the power and gas sectors. The MoE has a major role to play in supporting the SGPP and assuring the resulting projects and supporting agreements are commercially viable and sustainable.

Continue working on the "rehabilitation and re-commissioning" option for the Gerquduq gas processing plant (assuming the TFBSO does not take over this activity) Continue working on defining the power demand in the vicinity of the IPP to determine viability of the power plant supplying power locally rather than to the 220 kV (or the future 500 kV grid).

Continue consultations with the World Bank and IMF on the issue of Sovereign Guarantee.

Continue to work on defining the EIA scope as well as identifying the source of funding for this work as this is not part of the Sheberghan Gas Generation Activity Task Order current scope.

4 SECTION IV

4.1 Potential Problems Identified

World Bank-funded Gas Sector TA – Restructuring of the Gas Sector as a result of the TA will significantly impact of the Task Order potentially causing delays or conflict with SGPP recommendations/outcomes; continuous coordination is required.

FTBSO-funded Gas Sector work – Work performed by FTBSO contractors advising the Minister of Mines will impact on the Task Order work and may conflict with recommendations/outcomes; continuous coordination is required.

DABS lack of resources/knowledge and conflicting missions – DABS is in need of, but have not asked for, technical and commercial assistance in support of its role in the SGPP; DABS has a key role to play in making the SGPP commercially viable and sustainable, but without external support, DABS will not be able to play that role neither technically nor commercially.

USG introduction of the PMC to key Ministers – in Afghanistan all decisions are made by ministers; without proper introduction by the USG of the PMC and its role it will be very difficult if not impossible, to achieve a reasonable efficiency in the PMC's work; this introduction is urgently needed.

Major technical concerns – timely and adequate gas supply; viability of synchronizing the IPP with NEPS.

ANNEX 1

Sheberghan Gas-to-Power Strategic Program Sheberghan Working Group Monthly Meeting Meeting Minutes

March 13, 2012

Action Items

Implementation Letter (IL) - USAID will finalize the IL and send it to MoM and MoF for their review.

Gerquduq gas processing plant

- USAID/AEAI will follow-up with TFBSO on TFBSO role with regards to the rehabilitation of the Gerquduq gas processing plant.
- AEAI will determine whether the Gerquduq gas processing plant is currently operational, as has been reported by MoM

Transaction Advisers - OPIC will follow-up with TFBSO on TFBSO funding/hiring of Transaction Advisers.

Environmental Impact Assessment - AEAI and USAID will hold discussions with the World Bank on the issue of EIA.

Gas Allocation - AEAI will discuss with MoM the issue of gas allocation from the gas wells that are going to be rehabilitated by the ADB-funded gas-well rehabilitation project.

Sovereign Guarantee

- Mark Karnes will follow-up with the World Bank and IMF in Washington on the issue of sovereign guarantee.
- Dwight Nystrom will contact the IMF representative in Kabul on this issue.

Huddle - AEAI will make Huddle operational before the next SWG meeting.

Outstanding Critical Issues

Finalization of the Implementation Letter; signing by MoM, MoF and USAID; resolution of Conditions Precedent; signature of the Updated Memorandum of Collaboration by designated SWG stakeholders

Suggested Items

None.

SWG Decisions/Agreements

None.

Additions to the Risk/Issues Matrix and/or Financial Estimates

None at this time.

Discussion Summary

The meeting was via teleconference and began at 5:00 p.m. with introductions of the participants.

USAID opened the meeting by noting that this is the “SWG Lite” due to limited attendance as well as outstanding issues that were brought up in the first SWG meeting in February and have not been resolved yet.

New Chief of Party for the Sheberghan Gas Generation Project, Dr. Peter Jezek USAID introduced the new COP to the participants. The COP has over 30 years of experience in the energy sector including setting developing IPP programs in several countries. He has significant experience in Afghanistan, starting in 2004 when he participated in establishing the Office of Infrastructure Engineering and Energy in USAID/Afghanistan. In his past activities, Dr. Jezek has dealt with most of the SGDP GIRoA stakeholders, including MoM, MEW, DABS, MoF, and others.

COP briefly noted that in order for the program to succeed there has to be a team approach to the SGDP work. He asked the SWG stakeholders to work with the Program Manager/Coordinator (PMC) to identify issues/concerns/risks so that the SGDP team, working closely with each one of the stakeholders, can develop the processes to address and resolve the issues/concerns.

Implementation Letter (IL)--prerequisite to the on-budget funding to be provided by USAID to MoM

- USAID stated that the final review is being completed internally by USAID and the IL should be ready shortly to be sent to the MoF and MoM. Completion of the IL is a high priority for the USAID Mission and the Office of Infrastructure Engineering and Energy (OIEE) is sparing no effort to get this accomplished.
- Updated Memorandum of Collaboration (UMoC) USAID stated that the Updated Memorandum of Collaboration was prepared, outlining the current configuration of the SGDP and showing all components of the program as fully funded. USAID intends to meet with GIRoA stakeholders to discuss the current configuration of the program, introduce the PMC and inform them about the intent to get all of the stakeholders to sign the UMoC in a public ceremony.
- Transaction advisers to the Ministry of Mines (MoM) and DABS OPIC stated that they have shared the TOR for the transaction advisors with TFBSO and TFBSO
- has agreed, in principle, to fund the initial phase (perhaps the first year) of this technical assistance through their current contractor providing legal services to the Ministry of Mines. TFBSO hopes to have the transaction advisors in place sometime in the near future.
- USAID mentioned that the PMC has provided comments on the TOR for the
- transaction/foundation building advisors to USAID, but USAID has not had the chance to share the comments with OPIC and TFBSO, but will do so shortly.
- The investors asked about the timeframe for DABS and the gas supply entity to be able to
- negotiate a PPA and a GSA. The COP suggested that within the current environment and based on the current lack of knowledge of the IPP contractual documents and relationships, it may take two years before the parties are able to fully understand and negotiate a PPA and GSA. However, he suggested that the legal/commercial advisors that will assist DABS and the gas supply entity will be in a much better position within 3 - 4 months to assess the timeframe required for the GIRoA entities to be ready to negotiate a PPA and a GSA.

Corporatization and commercialization of Afghan Gas Enterprise (AGE) The COP mentioned that this is a very important issue and has to be discussed with MoM to determine their vision for the AGE. If it is decided that AGE should be a gas transmission company responsible for TAPI, then there has to be another entity that will own and operate the gas production and processing facilities developed under the SGDP. The World Bank should participate in this discussion because they are funding the technical assistance designed to address gas sector institutional and developmental issues, including the corporatization, commercialization, and capacity building of the AGE. The MoM has received

expressions of interest for this technical assistance from companies on February 25, but has not released information on the interested parties. At the request of the SWG stakeholders, the COP offered to circulate to the stakeholders the invitation for Expressions of Interest for this technical assistance issued by the MoM.

ContourGlobal asked whether it is easier to deal with a government agency at this stage rather than deal with a corporatized/commercial entity from the perspective of striking a deal based on national importance vs. a profitable venture.

The COP stated that the gas supply entity (AGE or another entity) could be developed as a privatized entity, a public private partnership, or a wholly government-owned corporatized entity. The final decision rests with MoM (GIROA). However, these discussions have to take place soon in order to develop a roadmap for that entity to take on the responsibility of being the gas supplier under the GSA to the privately owned power plant.

Scope of Work for legal assistance to the MoM and DABS regarding sale and purchase of gas and power.

This issue was addressed above under the Transaction Advisers item.

Viability of rehabilitating/restarting the Gerquduq Soviet-built gas processing plant to process gas from the Juma and Bashikurd fields to possibly accelerate supply of power plant quality gas to the IPP.

The COP stated that PMC has been progressing this item since the February 1 SWG meeting as requested by USAID. Two options to definitively address this issue have been developed and presented to USAID. PMC is awaiting further guidance from USAID on the next steps to be taken. Because TFBSO stated that they are working on this issue as well, a determination needs to be made whether TFBSO or USAID will implement this activity, to eliminate duplication of efforts. TFBSO confirmed that they are evaluating viability of rehabilitating the plant, but did not state expected completion date of their efforts. If USAID undertakes this activity, a team of five specialists could be mobilized by the PMC after April 20 to perform field assessment of the plant, once USAID's approval is secured. ADB stated that the MoM informed them that the Gerquduq gas processing plant is operational. However, most of the participants who are familiar with the plant mentioned that this plant has been dormant since 1989. The PMC will look further into this issue and report back to the working group in the next SWG meeting.

Viability of power supply from the IPP to meet local demand in the Jowzjan-Balkh-Farah region via 110 kV grid/viability of modular approach to power plant implementation starting in 2013.

The PMC is working closely with DABS on getting a demand forecast for the region and defining the required technical parameters to enable local grid supply. The PMC just hired a senior Afghan electrical systems engineer who is very familiar with the North East Power System and DABS. At the request of the SWG DABS provided local area supply/demand forecast data to the PMC at the end of February, but there are outstanding questions regarding data inputs, etc. Additional data gathered by the PMC from various sources has to be analyzed and reviewed with DABS in order to have consistency across the data points.

In the current 110 kV transmission system, with power supplied from Turkmenistan, voltage drops exceeding 50% occur in the course of the day. The 110 kV system is currently capable to deliver up to a maximum of 20 MW into the region.

Process for producing the required Environmental Impact Assessments (EIA) The COP stated that there was an EIA prepared as part of the Sheberghan 100 MW power generation feasibility study funded by USAID in 2005. That Environmental Assessment included a smaller, 100 MW power plant and a skid mounted gas processing plant. Also, the previous project, Sheberghan Gas Field Development Project, prepared an Initial Environmental Examination Report for the gas well drilling/rehabilitation program that will be funded on- budget by USAID in the Juma and Bashikurd fields.

The PMC has presented to USAID results of all prior environmental work and an analysis of what may be required if Partial Risk Guarantee is sought from the World Bank. The previous EIA also included processing sour gas (from the Gerquduq field) which has similar gas composition to the Juma and Bashikurd fields that are dedicated for fueling the proposed 200MW power plant.

The issue of World Bank's participation has to be further discussed to determine what is required in terms of EIA and also which agency will fund the work. The environmental work is currently not in the PMC scope.

Other issues ADB stated that so far they have four expressions of interest from companies in China, India, US, and Malaysia in response to the ADB-funded gas well rehabilitation tender issued by the MoM on February about 1 MMCM of gas per day. However, it is up to the Ministry of Mines to decide where the gas will be utilized. Bids are due on April 1, 2012.

The COP suggested that it is essential to have the gas allocation discussion with MoM and obtain a decision on this key issue, because the possibility of this gas being supplied to the 200 MW IPP was raised several time during the SWG meetings.

ADB also mentioned that the SMG team from DABS and representatives of MEW will meet with Fichtner in Istanbul April 24-26 to discuss the inception report for the Power Sector Master Plan. The Power Sector Master Plan is scheduled for completion by the end of 2012. (PMC Note: the Power Sector Master Plan needs to include the 200 MW Sheberghan IPP and the interconnection of the plant with NEPS addressing the synchronization issues, etc.

IPS reiterated the need for further gas development in order to ensure adequate supply of gas to the 200 MW power plant. Additional funding may be required to drill additional gas wells, thus securing the required 1.5 MMCMD of raw gas. The USAID/GIRoA funded program is estimated by Gustavson to supply approximately half of the required gas.

Mark Karnes stated that he had conversations with the IMF on the Sheberghan project and specially the issue of sovereign guarantee sought by the investors. These discussions have to continue in order for the IMF to be in a position to support the SGDP. Before the IMF will act on the SGDP needs it will seek the World Bank to analyze the SGDP for commercial soundness. Mark Karnes offered to follow-up on this issue with the World Bank and the IMF and get back to the SWG.

Dwight Nystrom offered his help with respect to the IMF. He mentioned that he will contact the IFM people in Kabul to see what the next steps should be.

The group discussed the timing for the next SWG meeting, which is tentatively set for Wednesday, April 18th.

The COP informed the SWG that the Huddle online collaboration site is expected to be ready for use about the end of March 2012. The Huddle site is intended to improve sharing of documents between SWG members. The PMC team is currently testing the site and as soon as the testing is complete, it will be rolled out for use by all SWG stakeholders.

ANNEX 2

Subject: Sheberghan Gas to Power Program (SGPP) and DABS's active participation in this Project.

Location: DABS, Office of the COO

Date: March 10, 2012

Participants: Eng. Shekeeb Nessar, COO

DABS AEAI Eng. Wakil Nasery

Purpose:

- To update DABS on the Sheberghan Gas Power Project (SGPP).
- To discuss the relevant issues outlined in a document sent to DABS by COP on 5th March 2012. To request DABS review of the document and provision of comments regarding the issues outlined in the document

Program scope briefly outlined by Eng. Wakil Nasery and the below issues were discussed

Program summary

- Commercial issues relevant to DABS Background on Tolling structure Power Purchases procedure from IPP
- Gas supply and responsibilities of the parties
- Technical issues relevant to DABS

DABS COO agreed with SGPP goals in the context of expanding domestic power generation. He indicated that there is adequate demand in the northwestern provinces to offtake 200 MW from an IPP.

The COO was only concerned about:

- Viability of synchronizing the IPP with power imports.
- DABS responsibility for gas supply to the IPP under the proposed Tolling Agreement

Eng. Wakil Nasery suggested next meeting with DABS to be between the COO and the Consultant team on Tuesday afternoon, 13th March 2012, for further discussion of the issues.

ANNEX 3

Sheberghan Gas to Power Program (SGPP)

Minutes of Meeting

Subject: Sheberghan Gas to Power Program (SGPP) – DABS Concerns
Location: DABS, Office of the Chief Operation Officer
Date: March 18, 2012
Participants: Eng. Shekeeb Nessar, Chief Operating Officer (COO) DABS AEAI Dr. Peter Jezek, Chief of Party (COP) Eng. Wakil Nasery, Power Systems Expert

Purpose:

- To update the DABS COO on progress of the Sheberghan Gas-to-Power Program (SGPP).
- To discuss concerns expressed by the COO resulting from the SGPP Issues Document sent to DABS on March 5, 2012.
- To request the DABS SMG to nominate representatives for technical and commercial issues relevant to DABS in support of further development of the Program

The COO expressed his support for the Program assuming the Program supports DABS mission in expanding affordable supply of electricity.

The COO discussed technical and commercial issues of major importance to DABS,

- Tolling Agreement is not acceptable to DABS, since DABS do not have any experience with gas supply and DABS has lots of bad experience with diesel fuel supply
- Power plant synchronization with any island within NEPS is a serious problem and it will take time to resolve this problem
- Domestic power generation based on indigenous primary energy sources such as natural gas is highly desirable for Afghanistan as well for DABS to enable DABS to better manage the risk of power supply from the neighboring countries and to make possible economic dispatch in the future

The COO pointed out the problems DABS is experiencing in negotiating PPAs with the neighboring countries.

During the meeting extensive discussion of technical issues and possible solutions took place.

The COP suggested DABS set up two teams, Technical and Commercial to work with AEAI on addressing issues relevant to DABS and to facilitate presentation of concrete issues for SMG consideration. The COO agreed with this suggestion and will discuss it with the SMG. The work required to address relevant issues of the 200 MW Sheberghan IPP should be more or less continuous to assure DABS is in a position to provide the required technical requirements to the IPP sponsors and to be prepared for negotiations of the contractual documents that will govern the relationships and performance of the participants.

The COP suggested that setting up a Sheberghan Power Project Office within DABS would better enable the AEAI team to support the DABS team during the process of addressing the relevant issues. The COO agreed with this proposition to set up the office within DABS.

In this Sheberghan Project office AEAI and DABS nominated staff will work closely together in

addressing all technical and commercial requirements pertinent to the Sheberghan IPP, such as demand forecast, IPP technical specifications such as sizing the units, dispatch requirements, plant limits, land requirements, substation and interconnection requirements, etc. and commercial issues such as power pricing and terms of capacity and energy supply.

The DABS COO will nominate technical and request the Chief Commercial Officer to nominate commercial staff within a week and prepare the Sheberghan Project Office subject to approval by the SMG.

AEAI will convey to the Sheberghan Working Group DABS' reservations concerning the Tolling Agreement (namely DABS inability to take responsibility for gas supply to the IPP). AEAJ will explore with USAID and the SWG options to address DABS concerns.

The COO will present the results of this meeting to the DABS SMG weekly meeting. The COO requested Eng. Wakil to prepare Minutes of this meeting to serve as an official record for DABS, SWG and AEAJ.

ANNEX 4

Sheberghan Gas to Power Program (SGPP)

Minutes of Meeting

Subject: Supply/Demand Forecast for Northwestern Provinces of Afghanistan
Location: DABS, Planning Department.
Date: March 26, 2012
Participants: DABS AEAI, Khwaja Masood Head of Planning and Control Department, Said Abdul Wahid, Staff Planning Department, M. Afzal, Staff Planning and Control Department
Eng. Wakil Nasery, Power Systems Engineer

Purpose:

- Update DABS Planning Department on status of development the SGPP
- Discuss Supply/Demand Forecast for Northwestern Provinces of Afghanistan
- Request DABS Planning Department for review a draft presentation on Supply/Demand Forecast for Northwestern Provinces.
- Review newly collected field data and discuss the next steps

Eng. Wakil Nasery briefly reviewed the objectives and scope of the SGPP; the component issues presented below were discussed and conclusion concerning next steps were drawn:

- Power Supply/Demand Forecast for MAZAR Division, 1391/2012
- Annual Demand in kWh for all Northern provinces.
- Annual Supply in kWh for Northern provinces.
- Deficit in kWh and as percentage of demand for those provinces.
- Installed distribution transformer capacity, type of s/s and voltage status, current demand, load shedding in each city distribution network.
- Demand forecast till Dec 2012 and status of development city distribution networks and expansion of industrial operations
- Other technical issues relevant to DABS.

DABS Head of Planning and his staff agreed with the forecasted supply/demand prepared by AEAI. He acknowledged that domestic generation is not adequate to meet the demand and the northwestern provinces could absorb 200 MW from the Sheberghan IPP, but he suggested expanding some of the data presented to include additional information listed below:

- 1) We should continue the efforts of collecting population information for the northwestern load centers including new connection applications and the customers that are currently not within the reach of distribution systems, but could be connected with reasonable expense.
- 2) Since Takhar s/s construction activities are in progress, it should be added to the demand forecast (cannot be served by the Sheberghan IPP without synchronization with NEPS and/or transmission expansion).
- 3) Demand forecast for Parwan should be added to the study because the distribution network of this city is expanding very fast (cannot be served by the Sheberghan IPP without synchronization with NEPS and transmission expansion) .
- 4) Suggestion was made to change the title from System Analyses to System Status. It was suggested to include the technical specifications on the single line diagram (SLD) for expedite understanding of the issues.
- 5) Minor corrections are required on Installed Capacity slides.

- 6) Further analysis of transmission and islanding by DABS Planning Department and AEAI is required.
- 7) DABS Planning Department and AEAI need to identify transmission options and synchronization issues to make possible delivery of power from the Sheberghan IPP to target load centers.

Eng. Wakil provided soft and hard copies of the presentation to DABS Planning Department and suggested next meeting to be held in near future with DABS SMG and the SGPP team. This suggestion was accepted by DABS Head of Planning. Once the above mentioned revisions/expansions of the presentation are completed, the DABS Head of Planning will arrange a meeting between DABS SMG and the SGPP team.

ANNEX 5

Meeting with OPIC

Date: March 08, 2012

Time: 10:00AM

Venue: OPIC's offices in Washington DC

Participants: Robert Drumheller, Bill Pegues, and Edrees Saljuki

Major points discussed:

- MoM: SGPP Consultant team is working with MoM, specifically with DM of Policy and Investment Promotion—Mr. Sadaat to address some of the issues raised in the draft Implementation Letter (IL). Obviously the IL has not been shared with MoM but the concepts and issues were brought to MoM's attention to ensure MoM's readiness to address the issues once the IL is signed.
- MEW: SGPP met with Minister Khan and briefed him on the transaction. Minister Khan seemed to be very supportive of the transaction process. Drumheller mentioned that this is very good news and a departure from his previous meetings with Minister Khan. OPIC is very pleased with this development.
- DABS: The team has met with DABS management several times to discuss issues related to technical as well operational and financial. These discussions are productive and need to continue. Major issues need to be raised in order to ensure their timely resolution for the transaction to proceed.
- Drumheller and Pegues both mentioned that the DABS issue is one of their prime concerns and a major risk at this point. They are concerned that whenever they talk to DABS management they show very impressive graphics of their progress but no details on the numbers. They want to see substantial progress in DABS financial and operational capability in order for DABS to be a viable partner in this transaction.
- Transaction Advisors: Pegues mentioned that TFBSO has agreed to fund the advisors, at least in the initial phase (perhaps for the first year). He has already shared the TOR with them and TFBSO has promised to put the TOR for bid as part of their current contract mechanism for MoM and therefore, they think it can be awarded sometime in the first week of April.

OPIC's Major Issues/Concerns:

1. DABS' financial capability—OPIC's view is that DABS needs to make substantial progress on their financial and operational capabilities in order to be able to participate in this transaction.
2. OPIC does need an Environmental Impact Assessment before they can move forward with financing the transaction. They need to see who is funding it and how long it will take.
3. OPIC needs to get its board's approval for this transaction and this will be done before the 2014 elections—the goal was to get it approved in 2012 but this is not going to happen so Drumheller will seek approval in 2013.

Follow-up items:

1. Edrees to send Pegues the tariff structure of DABS