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QUARTERLY REPORT 3RD QUARTER 2009

THE ENERGY CAPACITY INITIATIVE (ECI), CONTRACT NO.
DOT-I-00-04-00022-00, ORDER NO. DOT-I-03-04-00022-00



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Quarterly Report, 3rd Quarter 2009

The Energy Capacity Initiative, Contract No. DOT-I-00-04-00022-00, Order No. DOT-I-03-04-00022-00

ON THE COVER: Workshop for Energy Educators and Professionals on Energy Economics, Technology, and Policy - University of Wisconsin, Madison, USA

QUARTERLY REPORT **3RD QUARTER 2009**

**THE ENERGY CAPACITY INITIATIVE (ECI),
CONTRACT NO. DOT-I-00-04-0022-00,
ORDER NO. DOT-I-03-04-00022-00**

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.

INTRODUCTION

This is the Quarterly Report described in and required by the Contract for the Energy Capacity Initiative (ECI), which provides in relevant part (section F.5):

The Contractor shall submit quarterly progress reports to the USAID/Caucasus CTO within 15 days of the end of the quarter for the period covered by the report.

The Quarterly Report is, according to section F.5 and to requests by USAID, to include:

- A summary by task of all current activities
- The identification of major problem areas, together with recommendations for resolving these problems, schedules for resolution, and persons responsible for required actions
- Anticipated activities for the coming quarter
- Travel of short-term advisors to Georgia
- Travel of Georgian officials to regional events or Europe
- A complete financial overview

This is the third Quarterly Report submitted for the ECI Project.

TWO IMPORTANT EVENTS

At the outset, this report addresses two important events that took place during the third quarter of 2008 which has had a continuing impact on the scope and timing of ECI project tasking.

- First, in July 2008 the Prime Minister stated the view that the Government of Georgia (GoG) generally does not want recommendations on policy issues from donors or donor-funded projects, and that when it wanted such policy advice it would request it. USAID communicated the input from Prime Minister on policy advisory support to ECI, with the result that the project was partially redirected and the previously submitted work plan revised. A major objective of the original project scope was to improve the policy capabilities of the energy sector. The Prime Minister's directive dictated a major change of emphasis in the already defined grants program. In part to reflect this change in project direction, on 27 August 2008 USAID's Regional Contracting Officer (CO) approved a change in the name of the project from Energy Policy and Management Initiative to the Energy Capacity Initiative (ECI).¹

¹ As used in this Report, "ECI" should be read to mean ECI or EPMI, as the context requires.

- The second major event occurring prior to the fourth quarter of 2008 was Georgia's armed conflict with Russia in August. During the conflict ECI project relocated its expatriate short-term consultants and Chief of Party (with his family) to its office in Armenia. Due to the uncertainty of the situation and the inability to complete the interviews and tasks requiring access to GoG and Georgian commercial company personnel it was decided in the best interests of project costs to have the short-term consultants (Dr. Hameed Nezhad and Lejla Uzicanin) return home and with the expectation that they would resume their work once the situation in Georgia normalized. This resulted in delays the work planned for the third and fourth quarters of 2008 and beyond. In addition, the launch of the grants programs were postponed and since Georgia was subsequently in a "post-conflict" situation the focus of the energy strategy related grants program necessarily was impacted and was redesigned to recognize this change in circumstances and the direction of the Prime Minister.

IMPLEMENTATION OF CURRENT ACTIVITIES BY TASK²

Work Plan

At the end of June 2008, ECI submitted a revised Year One Work Plan (including a narrative describing the work and a spreadsheet showing activities and schedule) to reflect USAID comments on earlier drafts. USAID responded with comments on 27 July 2008. USAID focused its comments in particular on the methodologies to be employed by ECI in the institutional and corporate assessments to be conducted under Sub-tasks 1.3 and 1.4, and the labor skills gap analysis to be undertaken under Task 2. Subsequently ECI and USAID discussed the methodology issues and reached a tentative agreement on the approaches to be taken under the respective project activities. These agreements were reflected in a revised draft Year One Work Plan (narrative statement and spreadsheet) submitted by ECI to USAID on 25 August.

ECI submitted a revised Year One Work Plan package to USAID on 29 August 2008, to reflect the change in the project's name. The Year One Work Plan was again revised to reflect input from USAID and the changes in the situation in Georgia relative to the energy sector in the initial "post-conflict" and a revised draft with project status information included was submitted for comment to USAID on 29 December 2008. ECI is following the general outline of tasks presented in the current draft Year One Work Plan work plan and is in regular communication with USAID concerning timing of tasks and deliverables as the needs of the GoG change in this dynamic period.

ECI submitted a draft Year Two Work Plan package to USAID on March 18, 2009 to document progress made in Year One of the project and to detail the work planned for Year Two of the project. This plan reflects the impacts of both the Prime Minister's direction on Policy support and the conflict with Russia on the objectives and tasking of the ECI project. ECI is following the general outline of tasks presented in the current draft Year Two Work Plan work plan and is in regular communication with USAID concerning timing of tasks and deliverables as the needs of the GoG change in this dynamic post conflict period.

² In general, the text of this section follows the activity-by-activity schedule set out in ECI's Work Plan Spreadsheet, most recently updated on 29 August 2008.

Performance Monitoring Plan (PMP)

On 11 June 2008 ECI submitted the draft PMP and supporting documentation to USAID this PMP was revised to align with the Year Two Work Plan and was included as an attachment to the Year Two Work Plan.

Branding Implementation and Marking Plan

ECI submitted its draft *Branding Implementation and Marking Plan* to USAID for CTO approval on 13 June 2008. In mid-July 2008, USAID commented on the draft *Plan* and ECI submitted a revised *Branding Implementation and Marking Plan* incorporating the comments on 29 July 2008. After additional comments from USAID, ECI submitted a final *Plan* for CTO approval on 9 August 2008. On 29 August, ECI resubmitted the *Plan* to reflect the changed name of the Project.

On an issue related to branding and marking, by memorandum dated 8 August 2008 ECI requested guidance from USAID as to an apparent conflict between the requirements of the Graphics Standards Manual and those of the ECI contract relating to the contents of the cover page of Project documents. USAID guidance provided to ECI in the 4th Quarter of 2008 was that the USAID Graphics Standards Manual applies to all formally required submittals (e.g. ECI Quarterly Reports) and that the ECI Branding Implementation and Marking Plan applies to all other formal document submittals made to USAID.

Public Outreach. In August 2008, ECI designed and developed a web site, www.aeai.ge. For now, the site includes a brief description of the project and, more importantly, a description of the Energy Scholarship Program and downloadable application package and form of application. ECI took the web site live during the first week in September. ECI, has used the website to announce and update information related to project activities such as the evolving grants topics issue and the scholarship programs.

Personnel. In December AEAI replaced Mr. Watkins as the Chief of Party (COP) for the ECI project. This was an AEAI management decision based upon internal issues related to the AEAI's concerns regarding the performance and actions of Mr. Watkins and the evolving situation/needs of the ECI project following the armed conflict between Georgia and Russia. Mr. Watkins was replaced as COP by Mr. Charles A. Burge. Due to the decision of the GoG to proceed to Membership status in the Energy Community, ECI increased the participation of Ms. Uzicanin through additional trips to Georgia in order to address the additional support requirements needed in this area. We anticipate that additional short term support will be needed in the second and third quarters of 2009 to adequately prepare the GoG for negotiations with the EC Secretariat. In the 2nd quarter of 2009, the CCN Grants Manager resigned and was replaced by Ms. Sophio Barrett. ECI contracted for legal support and hired local staff (Marina Imedashvili) to support the review of existing laws and regulations that would be most important to the GoG as it prepares to become a full member of the Energy Community.

Task 1: Policy Analysis and Dialogue

Sub-task 1.1. Independent Policy Analysis through Grants

ECI initiated the grants program in the early part of the third quarter of 2008 with a briefing for prospective grants applicants on 3 July 2008. Earlier, ECI had identified universities, nongovernmental organizations (NGOs), and think tanks that might be interested in applying for grants.

ECI concluded the briefing/workshop by confirming that the grants program would launch on 11 August 2008 as previously advertised.³ On 7 August 2008 ECI submitted a complete package of final grants program documents to USAID, including the *Grants Manual*, the Request for Applications, the illustrative list of energy sector topics, and the form of applications.

However, the launch did not take place as scheduled because of the conflict with Russia. With USAID's concurrence, ECI advised the community of prospective grants applicants by email that the grants program launch would be postponed until further notice. ECI subsequently revised the grants program to align with the "post-conflict" needs of the GoG. In particular, topics that related to Georgia's energy security and those relating to conservation of energy resources were highlighted.⁴ ECI, therefore, conducted a revision of appropriate topics/issues and prepared revised drafts for review and comment by USAID and the Ministry of Energy (drafts submitted on 27 August, 3 September, and 26 September 2008). Some additional topics were proposed by the Ministry of Energy in light of the events of the conflict with Russia, and these were added to the list. And in mid-September, ECI submitted a revised Grants Manual for review and comment to USAID, with the new name of the project.

The revised program was re-launched in October 2008 and ECI received 38 grant applications in response to the request for proposals. The Ministry provided ECI with their assessment of which grant proposals were not considered to be a priority for the GoG at this time and the Technical Evaluation Committee (TEC) completed the review process based upon a prioritization of the grants by topic. Interviews were held with the top grant proposal candidates and six grant proposals were selected for final negotiations. Grant Agreements were negotiated and final version of the grants submitted to USAID at the end of this reporting period.

The selected grants were contracted and work commenced for the six awarded grants in this quarter. A summary of the progress of these grants follows:

ECI-GA-15

Lemniscopter Turbine Driven Micro Hydro Power Unit

Following tasks are on the way in this reporting period: Designing technological specifications and detail drawings of the turbine, developing final specifications, preparing

³ ECI reported to USAID on the 30 July 2008 workshop in its *Memorandum on Energy Sector Grants Workshop* (7 Aug 2008).

⁴ Shortly after the active conflict with Russia ended, the Ministry of Energy presented a list of items, or a "vision," consisting of GoG's urgent energy sector needs in light of the conflict.

and distributing purchase orders and subcontracts (if necessary), continuing unit manufacturing and processing works and initiating unit assembling and factory test processes.,

The grantee has already submitted to ECI a report on technological specifications of the turbine along with detail drawings of the aggregate. After completing this task, research on possible options for manufacturing parts and assembling the turbine was carried out as a result of which the project team presented three options (quotes) from three different vendors on manufacturing and procuring necessary parts for the aggregate and assembling it. The represented companies their prices were: MT+ - 2490.00, Tam Energy – 2580.00 and Simi – 2550.00. After reviewing the options and discussing the grantee’s arguments for choosing the preferred vendor ECI approved the selected company MT+ which was outstanding mainly for two categories – price and experience.

A contact was signed between the Energy Efficiency Center and MT+ on mentioned services and according to this contract the grantee already made an initial payment to this company for the services. Procurement and manufacturing of the spare parts for the aggregate is under way.

Second stage of presenting technological specifications and detail drawings is at the end of the seventh month of the project. The first set of these documents were presented to ECI at the end of the fourth month of the month.

Unit assembling and accordingly, factory test of the unit started this month and the developed program of these tests will be presented to ECI at the end of seventh month. Meanwhile, the grantee is working with the selected vendor and the factory for carrying out these tests of the parts which have been assembled so far.

All of the tasks mentioned above are carried out simultaneously and the grantee will continue to work on them until the eighth month of the project.

Task/Work Description	Target	Deadline (Project Month)	Status
Prepare general layout and assembling drawings	Drawings	II	Submitted
Hydrodynamic calculations and strength analysis of runner blade and specific parts	Drawings	III	Submitted
Design technological specifications and detail drawings	Specifications, drawings	IV, VII	Submitted
Manufacturing/processing works of the micro power unit	50% (Handover Protocol)	V	Completed
	100% (Handover Protocol)	VIII	

ECI-GA-16
Energy Online – Online Energy Information Magazine

Following four tasks are underway in this reporting period and all of them are not to be expected until the end of the project. These tasks are: Establishing contacts with partners and stakeholders, putting into operation the email addresses and developing user-friendly interface for the forum, creating and updating regional energy information database and starting a full-fledged functioning magazine and a forum.

The process of establishing contact on a regional level started last reporting period. Two travel arrangements were made to Armenia and Azerbaijan. Project team members who travelled to these destinations met with colleagues and on collaboration. Agreements on collaboration will be signed on a presentation ceremony which is planned for the sixth or seventh month of the project. As for the articles from these contacts will be included in the first edition of the magazine, the articles will be sent to the editorial board or physically brought to Tbilisi.

The grant team has been in contact with Trabzon University’s dean and verbal agreement has been reached on collaboration. Within next two weeks the dean of the university will be travelling to Batumi where the project director will hold a meeting with him.

The project team continues to receiving works to be published in the first edition of the online journal. So far works to be included in the magazine are: 8 articles, 3 innovations and an interview. The project team has also reached an agreement with Socar Georgia and Kanargo. These two companies will post their ads on the website for the duration of the grant project without any charge.

A list of important articles from scientific-technical journal “Energy” have been added to “previous years’ articles” which were recommended by the editorial board.

An interview with inventor Gia Chirakadze was published. The project has already received feedback about the interview and Mr. Chirakadze’s works.

The seminar which was scheduled for July for discussing energy and energy security was rescheduled until later. The reason was communicated to ECI: The project team would like to be able to discuss Energy Online journal future and its activities at this seminar, which will be possible after officially launching the website and publishing the first edition of the online magazine. ECI approved this change and expects the seminar to be held at the end of the seventh month (October) of the project.

The server for the website is still located at the project’s internet provider’s site and will remain there for now.

Description	Target	Deadline (Project month)	Status
Develop internal work procedures	Written Procedures	II	Completed

Design and produce the web-site for forum and magazine	Web-site	III	Completed
Development of the Manual for potential authors	Written Manual	III	Completed
Purchase of the domain address and hosting service	Contracts	III	Completed
Development of Energy Search Tool software	Software program	IV	Completed
Establishment of contacts with partners, experts, reviewers, other stakeholders	Memorandums of Understanding, Agreements	IV	Completed
Start-up preparedness of the internet-forum	100%	IV	Completed
Creation of the energy information database	First 50 records	V	Completed
Full-fledged functioning of the online magazine	First issue	VI	Will be completed in mid October
	Second issue	X	

ECI-GA-20

Potential of the Wood Energy Resources of Georgia and their Effective Application

The study of legal and institutional environment applicable to wood fuel production and supply has been finalized. It should be noted that the grantee started working on this task in the second month and a significant part of it was completed in the second month. The final report on the study of legal and institutional environment applicable to wood fuel production and supply has been submitted to ECI. The report is detailed overview of the subject and was included as an attachment of the grantee's first quarterly report.

The grantee has also finalized its work on task 4 which is overview of environmental and social aspects of wood fuel production and supply. The report which has already been submitted to ECI includes detail information on aspects of environment assessment and social aspects in regards of wood fuel.

As outlined in the work scheduled, the grantee started working on designing technical methodology for local wood fuel production in the second month of the project which was finalized at the of the fifth month and presented to ECI as a demonstration project. The project was based on an idea of installing a wood scrap boiler in mountainous regions of Oni in one of the schools which is partially heated with wood and coal boiler. The idea of the

demonstration project is to install a boiler in the part of the school which will be working on wood scrap and establish a local NGO and train its staff in maintenance of the boiler.

As outlined in the work plan of the grantee, a report on analysis and dynamics of Georgia's regional energy balances was submitted to ECI and included in the second quarterly report. The report discussed energy balances in different stages of country's development, analyzed trends of energy balances in on regional levels and discussed its dynamics.

Description	Submission Date (Program Month)	Target	Status
Differentiation of the Georgia's wood resources	II	Report	Submitted
Legal, technology and economy basis of the wood fuel production in Georgia	III	Report	Submitted
Environmental role of the Georgian forests and impact of excessive felling on stability of the water supply and hydro power generation	IV	Report	Submitted
Technical documents of the wood fueled energy saving heating system (Demonstration project)	V	Technical Documents	Completed and submitted
I Stage Summary Report	V	Report	Completed
Analysis and dynamics of the estimated energy balance for Georgia and its specific regions	VI	Report	Completed

ECI-GA-26
Cleaner Energy for IDPs

Following five tasks were to start/continue in this reporting period:
 Consultations with Government institutions on project goals, Market study of technical supplier, questionnaires filled out by IDPs, gathering necessary information for energy audit, conducting energy and economy calculations and preparing energy audit reports.

From these tasks two tasks were supposed to be finalized: consultations with government institutions and the process of IDPs filling out questionnaires.

The grantee has met with following governmental institutions and donor organizations concerning the goals of the project and mainly at this point for preparing a demonstration project within "Cleaner Energy for IDPs" topic:

Ministry of energy of Georgia, Deputy Minister Mariam Valishvili, Ministry of Accommodation and Refugees of Georgia, Department of International Relations Iulia Kharashvili, Care International Project Manager Maka Menabde, International Rescue Committee, WASH coordinator Vakhtang Shubladze, World Vision, Project Coordinator Irene Sigua. There are more meetings planned within this activity which did not take place in August due to a holiday season.

Market study of the technical supplier was started in July and finalized in August. According to those results the grantee is ready to start working on a demonstration project from a technical point of view once the selection of site for demo projects is completed and also the type of these demo projects also selected.

The grantee has been communicating with ECI concerning the doubts and options for the demo project. After developing a criteria of selection sites for a demo project, two settlements were selected tentatively and are not being considered for possible options. The timing of completing these projects was revised as Grantee expressed a wish to finalize them by the last week of October when an official environmental week is held in Georgia. It was agreed to expedite the wire of the funds for this activity in order to finish the project by the end October.

Two individuals were hired specifically to coordinate and facilitate the process of filling out the questionnaires by IDPs, these questionnaires were developed in the second month of the project for families and for settlement "headmen".

The grantee has visited four IDP settlement sites with a purpose to assess current conditions and energy supply patterns. "General description of buildings in new IDP settlements" has been submitted and works on defining renewable energy potential of the IDP settlements have started.

Description of Deliverables	Target	Deadline (Project Month)	Status
Criteria for selection of IDP settlements	Report	III	Submitted
Energy consumption and demand questionnaires	Questionnaires	V	Completed
Energy audit reports	Reports	VI	Submitted

ECI-GA-28

Development of Emergency Management Actions Plan and Regulatory Basis for Georgia Energy Sector

The consortium has finalized working on task 3 which was oriented on research on Energy emergency response experiences in the world, namely the US, Europe and CIS countries. Within the scope of the task, the grantee has used different methods of research: online,

personal contacts abroad, interviews, correspondence with different energy organizations abroad etc. Three main directions were outlined: collaboration between different government structures during emergencies, International collaboration during emergencies and customers and companies during emergencies.

Next task, energy emergency classification report has been submitted to ECI. The report provides an in depth information about electricity and natural gas sector emergencies on regional and local levels, defines emergency situation stages, energy security, customer groups.

The grantee has met with energy emergency working group at the Ministry of Energy of Georgia and discussed the directions of the project. The project team was advised by this group from the Ministry's perspective and an agreement was reached on collaboration between the consortium and the group. At the meeting it was decided that working on action plans for emergency situations should start from the energy sector and not from the state level. Three additional meetings were held with the head of emergency planning group from the Ministry of Energy, Mr. Tamaz Txelidze. This group is currently working on developing Ministry of Energy's strategy under Ministry of Internal Affairs emergency plan, unit 9.

It has to be noted that even though the grantee and the group at the Ministry have met and discussed their scopes of work and agreed to meet from time to time and share experiences there are no plans made of tighter collaboration as these two groups are working on different issues even if under the same umbrella of emergency planning. Therefore, it has to be expected that if the grantee continues to work in this direction, they will not be able to contribute to the Ministry's current type of work on emergency planning.

The grantee is also planning a joint meeting with emergency situation management department at Ministry of Internal Affairs.

The seventh task that the grantee has started working on developing emergency scenarios for electricity and natural gas sector. The report for this task is not due until the end of the seventh month. The grantee has started working on this task with Georgia's natural gas sector.

Description of Deliverables	Target	Deadline (Project Month)	Status
Definition of the emergency situations and conditions	Report	I	Submitted
Analysis of the current conditions	Report	II	Submitted
Energy response experience of world countries	Report	III	Submitted
Classification of energy emergencies	Report	IV	Submitted

Action plans for overall and energy-specific emergencies (at the public management level)	Draft action plans	V	Completed
Action plans for overall and energy-specific emergencies (applicable to energy companies)	Draft action plans	VI	Completed

Sub-task 1.2 Independent Policy Dialogue Organized by the Contractor

This subtask includes two distinct activities, the development of an energy sector database and the pursuit of energy sector policy dialogue undertaken by ECI (as opposed to grantees under Subtask 1.1). We discuss each of these activities in turn.

Energy sector database. As stated in the contract, ECI is to:

Research available sources of data for policy analysis (including the Ministry of Energy and the Department of Statistics), develop a database for independent policy analysis, and determine where to house such a database.

During the third and continuing into the fourth quarter of 2008, ECI's short-term IT expert conducted a preliminary assessment of the data needs and data bases in use in the energy sector.

During the fourth quarter of 2008 it was determined that another USAID funded project (SYNERGY) had specific responsibilities related to energy sector data collection and assessment (modeling) and decision support. An initial meeting with the SYNERGY project was held and a description of the data sets needed to support the modeling tool to be used (MARKAL/TIMES) was provided to ECI. Consequently and with input from the Ministry and USAID, to avoid possible duplication of efforts between SYNERGY and ECI further assessment and analysis in this topic area was put on hold until the SYNERGY project data assessment is completed. During the 3rd Quarter discussion with the local expert working on the SYNERGY project were held to verify the progress on data assessment and to confirm that the results of the SYNERGY assessment will align with this task assignment.

- **Energy sector policy dialogue organized by ECI.** Under its contract, ECI was not to commence work on this Sub-task until after grants are awarded under Sub-task 1.1. ECI has, therefore, now begun to address the needs for dialog as required by this Sub-task and in its first outreach event provided a detailed workshop/strategy development panel discussion session on Hydro Power Investment. This session was attended by over forty energy sector experts, professionals and investors. Mr. John Gulliver of Pierce Atwood and Mr. Kenneth Weiner of Nixon Peabody provided expert input and workshop leadership for this event and First Deputy Minister Mariam Valishvilli represented the Ministry on the panel. A series of pre and post workshop

meetings were held with key energy sector investment stakeholders (USAID, World Bank, IFC, EBRD, KfW, ADB, Ministry of Energy, GNEWRC). A report detailing the findings of this event and recommendations was provided to USAID in the 3rd Quarter. The workshop for energy educators and professionals on Energy Economics, Technology, and Policy at the University of Wisconsin, Madison also provided opportunity for policy dialog between energy educators and professionals. Workshop elements related to energy efficiency and renewable energy programs contributed addressing the policy decision making and dialog needs assessed by the ECI project.

Sub-task 1.3 Demand-driven Technical Assistance and Training to Support Policy Analysis, Policy Development, and Policy Implementation and Sub-task 1.4 Assistance to State-Owned and Private Companies

In discussions with USAID in July 2008, ECI formulated an acceptable methodology for its assessment of energy sector institutions. The preliminary reviews and assessment assignments were initially divided between three international short-term experts.

For Sub-task 1.3, the GoG assessments were focused upon the two key institutions – the Ministry of Energy and the regulator, newly-designated the Georgian National Energy and Water Regulatory Commission (GNEWRC).

For Sub-task 1.4 ECI interviewed a number of electricity and natural gas sector enterprises in June and July of 2008, briefing management of the companies on the assessments to be undertaken and soliciting expressions of interest. The Electricity System Commercial Operator (ESCO) and Georgia State Electrosystem (GSE) responded positively to ECI's assessment offer, and with USAID's approval, ECI selected the two enterprises for assessment.⁵

On sub-task 1.3, short-term consultant Leszek Kasprowicz commenced ECI's assessment under this Sub-task upon his arrival in Georgia in early July 2008.⁶ Mr. Kasprowicz first reviewed documents relevant to GNEWRC's legal authority, responsibilities, and functions, such as the Law on Electricity and Natural Gas, as amended. He also reviewed reports on GNEWRC from prior years, many of them donor-funded. Mr. Kasprowicz then spent more than a full week at GNEWRC, conducting interviews with the Chairman and the two other commissioners, the Executive Director, all department and section heads, and selected specialists. Mr. Kasprowicz also secured and reviewed records pertaining to internal operations, personnel rules, and staff and commissioner training.

⁵ ESCO had been scheduled for an assessment by FORECAST/Caucasus under its Human and Institutional Capacity Development methodology at about the same time that ECI was to begin its assessment. With USAID's consent, FORECAST deferred to ECI on the ESCO assessment.

⁶ ECI discussed its assessment of the Ministry of Energy with Ministry officials in late June or early July. The Ministry advised that it planned on moving its offices in July of 2008 and also would undertake a reorganization during that period. That, plus the fact that many GoG employees take their vacations in August, caused the Ministry to suggest that ECI defer its assessment until September 2008. ECI therefore selected GNEWRC for the initial GoG assessment.

Shortly before Mr. Kasproicz's began his assessment the Government directed GNEWRC to move to Kutaisi, some three and a half hours drive from Tbilisi. A significant number of staff members decided not to make the move, and the interview situation was further complicated by vacations scheduled for August. and, later, by the conflict with Russia. Mr. Kasproicz revisited GNEWRC during his October 2008 trip to Georgia to update his assessment after GNEWRC's move to Kutaisi. Follow-up meetings with GNEWRC to confirm the information collected and initial assessments made were held in December by short term consultant Ms. Lijla Uzicanin. Clarification of issues additional input was provided by GNEWRC during Ms. Uzicanin's 1st Quarter 2009 trips and the draft report was reviewed by the Chairman and his staff and completed in March.

During his October 2008 trip Mr. Kasproicz interviewed and assessed the Ministry or Energy for this sub-task. Mr. Kasproicz completed his report of the interviews and assessments from his home office and submitted them to ECI in November 2008. Subsequent, interviews by Ms Uzicanin with the Ministry of Energy counterparts during her December trip indicated that a number of issues needed to be clarified and that more interviews would be needed to properly assess the needs for the Ministry. Some of these additional interviews were conducted during Ms. Uzicanin's two trips to Georgia in 1st Quarter of 2009. The details of the Ministry of Energy assessment will be completed during the conduct Emergency Planning Grant work and as a component of the EC Membership assistance that is described later in this report.

Regarding Sub-task 1.4 assessments, short-term consultant Stanley Graves arrived in Georgia to commence his assessments of ESCO and GSE in mid-July 2008. Mr. Graves reviewed pertinent documents and then interviewed the General Director and nine managers of ESCO. As he conducted these activities, Mr. Graves prepared his trip report reflecting his assessment for ultimate use in the ECI assessment report.

Mr. Graves also commenced ECI's assessment of GSE, meeting with the General Director and additional managers prior to turning the field work over to ECI short-term consultant, Ms. Lejla Uzicanin. Ms. Uzicanin reviewed materials relevant to GSE's functions and authorities and commenced interviews with GSE staff, but the conflict with Russia intervened and Ms. Uzicanin was relocated to AEAI's Armenia office and then sent back home before the end of her scheduled trip and the completion of all the required interviews and assessments.

Mr. Graves submitted his interview and assessment input to ECI in October 2008 and Ms. Uzicanin conducted further meetings with GSE during her October 2008 trip to Georgia. During Ms. Uzicanin's December 2008 trip she was assigned overall Subtask 1.3 and 1.4 reporting coordinator and in this role she conducted follow-up interviews with all the counterparts as well as worked on developing a consistent and concise format for the assessment report itself. Due to the timing range of interview follow-up that has been determined to be required, it was decided to provide reporting in two stages. ECI has provided individual reports to USAID for each entity assessed. Each draft assessment was review by the appropriate counterpart prior to submittal. ECI will consolidate key information from the individual preliminary reports into a single overall summary assessment report after review and concurrence input on the preliminary reports from USAID.

Task 2: Higher Education Programs to Supply a Professional Workforce for the Energy Sector

Task 2 includes the development of an energy sector higher education program for Georgian universities, to be designed with input from the labor skills gap analysis (and the assessments under Sub-tasks 1.3 and 1.4), and a program to award several scholarships for graduate energy studies in the United States.

Georgia energy sector graduate level educational program. ECI introduced the higher education program to representatives of Georgian universities at the 3 July 2008 briefing (described earlier as to the grants program). After presenting the grants program material, ECI covered the following items relevant to the higher education program:

- Energy sector skills gap analysis and interviews with universities
- Tentative schedule
- Scholarship program
- Duration of the educational program
- Amount of grant pool
- Other issues:
 - Enterprise employees.
 - Existing vs. new programs.

The briefing on the higher education program produced significant interest among the attendees from local educational institutions. Subsequently, ECI began meeting with local universities to follow up on the briefing and to collect information about the universities and their programs for review by ECI's education experts.

ECI and USAID discussed the methodology for the energy sector labor skills gap analysis intensively during the last week in July and the month of August 2008, culminating in an agreement in principle on the form and content for the methodology. ECI submitted its draft *Professional Skills Gap Analysis Methodology Report* to USAID for review and comment on 4 September 2008. During this 3rd quarter of 2009 ECI:

- Awarded four grants to four Georgian Universities for development of advanced degree energy management oriented programs and concentrations. The selected Universities commenced the process of development of curriculum and courses with one University (ISET) to begin its energy management concentration program in the Fall Semester of 2009 and the other three programs will begin in the Fall Semester of 2010.
- Conducted a workshop for energy educators and professionals on Energy Economics, Technology, and Policy at the University of Wisconsin, Madison. This workshop was attended by fourteen professionals. The purpose of this workshop was two fold. The first was to expose Georgian energy professionals and educator to current US practice in energy technology and educational methods and to demonstrate the value of the center of excellence concept that is a part of the energy sector graduate program grants being implemented by ECI. The second was to provide assistance to the energy educators in the development of appropriate curriculum for the advanced degree energy education programs they were developing under this ECI grant program. The third purpose was to put a cross-section of educators and professionals in a single group to foster dialog between

educators and the consumers of the product of the educational system – the energy companies.

- Conducted a follow-up workshop with attendees and other local energy professionals to expand the audience and extend the experience gained by the professionals who attended the workshop in Madison.
- Conducted distance learning system test in cooperation with the Engineering and Professional Development Department of the University of Wisconsin.

US scholarship program.

August 2008 ECI prepared and submitted to USAID for review and comment an *Outline of Competitive Awards Process for United States Energy Scholarship Program*. At the same time, ECI prepared a package of scholarship program documents, including instructions and a form of application. ECI also submitted drafts of these documents to USAID for review and comment, and ECI discussed the drafts at several meetings with USAID. Eventually, after agreement on USAID's recommendations, the CTO approved the package of scholarship program documents on 12 September 2008. ECI launched the program on 15 September 2008. In October the scholarships were clearly established as to be for a two year advanced degree program in energy.

With USAID input and concurrence it was decided to set the number of US Scholarships to be awarded at three and the process of scoring candidates based upon profile/testing was finalized and was used to select the finalist for this program. Five finalists were selected by the review committee and ECI is assisting them in applying to the selected US University programs for the fall semester of 2009.

The first three candidates were successful in their applications and have been awarded scholarships at three different Universities (University of Wisconsin; University of Minnesota; New York Institute of Technology) in the USA.

In the 3rd Quarter of 2009 ECI assisted the scholarship winners in travel, housing, visas, registration, and other preparations for their individual graduate degree programs in the USA. All scholarship recipients began their individual courses of instruction at their Universities and ECI will be receiving quarterly updates from them.

Task 3: Integration into European and Black Sea/Caspian Energy Markets

Under Task 3, ECI is to support the attendance of Ministry of Energy and GNEWRC representatives at the meetings of the Athens Energy Community (EC). ECI is also to "provide technical assistance and on-the-job training to the Ministry and GNERC on the terms and conditions applicable to full signatories of the Athens Energy Community". Lejla Uzicanin, ECI's expert on the Athens Energy Community Treaty, visited Georgia in late July 2008 to begin ECI's work under Task 3 (and, as noted above, under Sub-task 1.4). She conducted an introductory presentation to the Ministry of Energy, GNEWRC, GOGC, and GSE on the ECI met with representatives of the Ministry of Energy, Georgia Oil & Gas Corporation, Georgia State Elektrosystem, and USAID on 7 August 2008 so that Ms. Uzicanin could present the basics of the Energy Community Treaty.

In August 2008, the Ministry of Energy requested that ECI identify and study all of the energy sector and energy-related treaties, programs, and initiatives to which Georgia is a party and advise the Ministry of the requirements, costs and benefits of each, so that the Ministry (and thus GoG) would have a comprehensive, rather than a piecemeal, understanding of its commitments. Some of the treaties and programs wholly or partially devoted to energy are:

- The Energy Charter Treaty (signatory)
- The Energy Community Treaty (Observer)
- The EU Neighborhood Policy (participant)
- INOGATE (signatory)
- GUUAM (member)
- The Black Sea Transmission Project (participant)
- Intelligent Energy (EU Program) (tentative participant)
- The Baku Initiative (partner)

In consultation, USAID agreed that the Report on Strategic Regional Issue for Georgia to be prepared under Task 3 would serve as the appropriate vehicle for honoring the Ministry's request. ECI will submit the analysis requested by the Ministry as a component of its support for the GoG becoming a full member in the Energy Community.

ECI continued its support of the GoG attendance at meetings of the Energy Community (including the EC's Ministerial Council, High Level Working Group, Regulatory Board, and Electricity and Gas Fora) in this quarter.

During the 3rd Quarter, ECI supported, in whole or in part, attendance at regional energy initiatives by Georgia representatives as follows:

Date	Event	Attendees	Location
September 24, 2009	Energy Community PHLG meeting	Elene Gubianuri, Head of International Relations Division, Ministry of Energy of Georgia	Belgrade, Serbia
September 25, 2009	Energy Community Oil Forum	Elene Gubianuri, Head of International Relations Division, Ministry of Energy of Georgia	Belgrade, Serbia

During the 4th Quarter of 2008 the Ministry expressed its interest in understanding what it would require to become a full member of the Energy Community and in the 1st Quarter of 2009 the Minister requested support for this activity and the specifically to have Ms Uzicanin provide support for their Membership negotiations. ECI will provide this support as requested up to the limitation of our currently allocated LOE (80 days) for Ms. Uzicanin for year two of the project. She will also support and assist in the assessment of the Ministry's obligations related to a number of treaties and agreements that was requested earlier by the Ministry. ECI provided a statement of work and plan for this support but was informed that no additional funding would be provided at this time. Consequently, this was taken into account during the development of the Year 2 Work Plan and the development of ECI's request for budget realignment. During the 2nd Quarter Ms. Uzicanin provided both pre and post Energy Community meeting advisory support in this capacity.

It should be understood that the support for the full period of Membership negotiation and Membership advisory support subsequent to the negotiations would require a much greater level of support than is possible in our current budget. In addition, the probable timeline for membership processing (now through mid/late 2010) with the considerable work of membership commitment implementation that would follow their membership acceptance would extend their need for advisory support for a number of years beyond their membership acceptance date. ECI feels that this support would require not only Ms. Uzicanin's knowledge and process oversight, but also the expert advisory support from a number of local and international experts. ECI discussed the details of the Minister's request for support with the Ministry and developed a number of support options for USAID consideration.

ECI team reviewing the Georgian laws and other obligations regarding the energy sector with a priority on those that will possibly need to be revised to meet EC membership requirements. ECI has reviewed the following laws and updated the English versions according to the amendments in Georgian versions: Georgian Law on Electricity and Natural Gas, The Electricity (Capacity) Market Rules, Georgian Law on National Independent Regulatory Authorities, GNERC Resolution on approval of "Natural Gas Consumption Rules", GNERC Resolution on approval of "Electricity (Capacity) Supply and Consumption Rules", Georgian Law on Licenses and Permits.

PROBLEM AREAS

Delays caused by the conflict with Russia. The August 2008 conflict between Georgia and Russia has caused delays and reorientation in nearly all areas of the project. Following the conflict which began on 7 August 2008 ECI had to relocate two of its short-term expatriate consultants and the COP and his family to our office in Armenia. We then sent the short-term expatriate consultants home because they could not meet with counterparts or conduct their assessments and it was determined that this action would minimize project costs. The conflict created a period during which travel to Georgia by our experts was prohibited and during which, therefore, ECI could not make progress on project objectives. ECI addressed the possible delays in project implementation caused by the conflict in its draft work plans submitted on 25 August 2008, to the extent that such delays could then be identified. This impact has been further clarified in our latest Year One Work Plan submittal of 29 December, 2008 and our Year Two Work Plan submitted on 18 March 2009. The Work Plans submitted have not yet been commented upon by USAID. ECI is working on the project based upon the most recently submitted work plan draft and will continue to maintain regular dialog with the project CTO and USAID mission management as the current post conflict situation evolves.

Redesign of the grants program. As discussed above, ECI twice redesigned the grants program during the third quarter. The Prime Minister's limitation on policy initiatives caused the first set of modifications, which included a major reorientation of the goals of the project and its list of illustrative energy sector topics suitable for grants applications. The conflict with Russia caused the second review and redesign of the grants program, as ECI focused (in consultation with USAID and the Ministry of Energy) on topics more vital to Georgia in the post-conflict environment. Consequently, the grants program initiation process was delayed until October 2008.

GENEWC authority and independence. As noted in this project's prior quarterly reports, a major challenge identified by ECI was the apparent GoG attitude related to the independent authority of GENEWC. As USAID noted in the scope of work for ECI, "GENERC operates in an unstable environment", made acute by "a loss of institutional capability through the departure of personnel, caused by its instability [and] changes in management". As ECI noted, these factors intensified when GoG formally notified GENEWC that it would be physically relocated to Kutaisi. Now that the move is complete, GENEWC lost approximately 20 employees (who did not want to make the move). The most severe adverse effects of this loss of personnel are likely to be short-term, and ECI has addressed this issue in its GENEWRD assessment report.

Another problem that needs to be clearly addressed is the role and independence of the regulator. ECI recommends that we simply acknowledge the doubt regarding GENEWC's authority, and continue to hold joint training or education programs with personnel from the Commission, the Ministry of Energy, and other stakeholders on selected topics related to regulation. It is expected that the GoG's focus on becoming an energy exporter will necessarily result in the needed changes in this regulatory problem area due to investor and international funding entity (e.g. EBRD, WB, IFC) input and mandates related to maximizing the potential for investment in new renewable energy sources.

Limitation on Support for Task 3 Energy Community Membership

The project contract and funding anticipated this support to only consist of Year 1 activities. The GoG's decision to apply for full membership cannot be fully supported (advisory support or meeting support) from the current budget. A realignment of the budget will be required just to provide immediate support (through Q4 of 2009) for the membership negotiations. Additional support will be needed for such activities as the development of a grid code and although such support is within the scope of this contract these support elements are not funded in the current budget.

ANTICIPATED ACTIVITIES FOR THE COMING QUARTER

As reported in the ECI Year Two Work Plan (17 February 2009 draft), the program anticipates the following activities during the fourth quarter of 2009.

Overall Program

Gain approval for ECI Year Two Work Plan and develop first draft of the Year Three Work Plan

Task 1 Policy Analysis and Dialogue

Subtask 1.1: Independent Policy Analysis through Grants

Continue grant program by implementation of the second round of grants and management of the tasks and activities of the both rounds of grants.

Sub-task 1.2 Independent Policy Dialogue Organized by the Contractor

Energy sector database

Collaboratively continue the assessment of the energy sector data needs based upon prior data and user assessments and surveys using the input from SYNENERGY project and propose a short term solution to the current data/information energy sector challenges.

Develop the recommendation for a sustainable energy sector database.

Energy sector policy dialogue organized by ECI

ECI will continue to work on this subtask during the fourth quarter 2009, through the use of the ECI Project website and the Energy Journal website as well as through targeted training and workshop sessions.

Sub-task 1.3 Demand-driven Technical Assistance and Training to Support Policy Analysis, Policy Development, and Policy Implementation

Continue to prepare and submit the Reports on Organizational Assessments and prepare the Plan for Technical Assistance and Training by major organizations.

With USAID approval, continue to provide technical assistance and training programs.(workshops, seminars and institutional course development).

Sub-task 1.4 Assistance to State-Owned and Private Companies

Continue to prepare final versions and submit the Reports on Organizational Assessments and prepare the Plan for Technical Assistance and Training by major organizations.

With USAID approval, continue to provide technical assistance and training programs (workshops, seminars and institutional course development).

Task 2: Higher Education Programs to Supply a Professional Workforce for the Energy Sector

Labor skills gap analysis

Continue to integrate results of the Professional Skills Gap Analysis and assessments into the appropriate program of workshops and training sessions.

As appropriate, assist grantee Universities in the design/implementation of their graduate education program(s) to address the priority skill areas identified in the gap analysis with the greatest market demand not met by current or planned university programs.

After identification of priority areas, develop an action plan for long-and medium-term education programs to meet the prioritized energy sector workforce development needs, including a plan for development of curricula, courses, and case studies.

Energy Scholarship Program

Continue to assist US and local scholarship participants in their programs at selected Universities in the US and Georgia

Develop the local higher education programs that includes US based energy program specific training for educators and specialists (train-the-trainers).

Task 3: Integration into European and Black Sea/Caspian Energy Markets

Expand the attendee participation in the 2009 Energy Community Meetings.

Prepare and submit to USAID a Report on Strategic Regional Energy Issues for Georgia.

Continue to work with GoG/GNEWRC to review roles and responsibilities respecting the Energy Community process and other regional energy issues, to more completely present the benefits and impact of membership.

TRAVEL OF SHORT-TERM ADVISORS TO GEORGIA

During the forth quarter of 2009, ECI expects the following short-term advisors to travel to Georgia:

Name	Month(s)Expected	Purpose of Trip
Lejla Uzicanin	December 2009	Provide expertise in assisting the GoG in EC pre membership activities plan for participation in regional/international initiatives under Sub-task
Hameed Nezhad	December 2009 Plus work from USA in support of scholarship participants and educators	Provide expertise in the development of local educational programs and scholarships prepare report on skills gap analysis

TRAVEL OF GEORGIA OFFICIALS TO REGIONAL EVENTS OR EUROPE

ECI expects to support attendance by key Georgia officials at the Energy Community meetings during the next quarter,

ATTACHMENT 1

**Performance Monitoring Plan (PMP) AND EXPLANATIONS OF INDICATORS FOR PMP
ECI CONTRACT NO. DOT-I-00-04-00022-00, ORDER NO. DOT-I-03-04-00022
Year 1-3 revised 12-01-09**

AEAI ECI Performance Monitoring Plan (PMP)			
Program Outcomes	Program Expected Results (ERs)	Results Indicators	Records of Performance or Source of Data
<p>Outcome 1: Energy Issues and Dialogue</p> <p>1. 1. Energy issues analysis through grants award Program;</p>	<p>1..1. 1 Capacity of potential grant applicants improved</p> <p>1.1.2 Direct grants to NGOs, think tanks and universities to undertake research and analysis awarded;</p> <p>1.1.3 Monitoring methodology for Grant program prepared and implemented</p>	<ul style="list-style-type: none"> • Topics for Grants program identified in consultation with GoG and USAID. • 2 training workshop for potential grants applicants. Number participants up to 60; • at least three grants awarded in the first year to NGOs, think tanks and or Universities; • At least three grants awarded during the second year • Regular Monitoring Plan approved by the USAID; 	<p>Grant-making Manual (including evaluation criteria) developed</p> <p>List of Policy Topics and Activities</p> <p>Draft manual;</p> <p>Workshop materials, presentations.</p> <p>Pre-bid workshop memo. Grantee records and reports;</p> <p>Grant evaluation reports</p> <p>Monitoring reports</p>
<p>1.2. Independent policy dialogue organized by the ECI</p>	<p>1.2.1 Energy Sector Database .</p> <p>1.2.2 Important energy issues not addressed by grantees identified.</p>	<ul style="list-style-type: none"> • Develop questionnaire • Potential data users determined • Establish preliminary data list <p>If creation of the database is determined to be feasible and useful, design database, populate database, and develop a plan with counterparts for database maintenance.</p> <ul style="list-style-type: none"> • Plan to address energy issues approved by USAID. • Organization of training workshops (on demand) with participation of 50 participants • 	<p>Report on database</p> <p>Database accessible through Internet for grant applicants, policy maker and general public.</p> <p>List of topics on policy issues;</p> <p>Workshop/conference materials, list of participants, reports.</p>

Program Outcomes	Program Expected Results (ERs)	Results Indicators	Records of Performance or Source of Data
<p>1.3. Demand-driven Technical Assistance and Training to support Policy Analysis, Policy Development and Policy Implementation;</p>	<p>1.3.1 Assessment methodology developed</p> <p>1.3.2 Training plan for top energy policy makers from Government institutions on demand from these institutions;</p> <p>Impact assessment of completed TA and Trainings for year 2 Update Training Plan for year 3</p>	<ul style="list-style-type: none"> • At least two Governmental Organizations, one, regulatory body, 2 state utilities and civil society organizations undertaking capacity assessments as a result of USG assistance <p>Training Plans were approved by the beneficiaries and USAID;</p>	<p>Reports on human and institutional capacity assessments of GoG.</p> <p>Draft Training Plans Impact assessment reports</p> <p>List of training participants</p>
<p>1.4 Assistance to State-owned and private companies on their demand</p>	<p>1.3.1 Assessment methodology developed</p> <p>1.4.1 Plan for capacity building in the State owned energy Companies</p>	<ul style="list-style-type: none"> • Plan was approved by the beneficiaries and USAID; • Capacity of at least two state owned companies (GSE and ESCO) improved • Capacity of at least 2 private energy company improved 	<p>Report on human and institutional capacity assessments of the State Owned Companies.</p> <p>Training materials and List of participants</p>
<p>Outcome 2: Higher Education Programs to Supply a Professional Workforce for the Energy Sector</p> <p>2. 1. General/strategic management skills developed in the energy sector workforce,.</p>	<p>2.1.1 skills gap analysis in Energy Sector;</p> <p>High Education Grant Award</p> <p>2.1.3. Training plan to train local faculty in delivering curricula and courses;</p> <p>Capacity building of the selected high education institutions</p>	<ul style="list-style-type: none"> • Methodology for skill gap analysis survey prepared and approved by the USAID • At least 200 persons participated in survey • Skills gap analysis report approved by the USAID and the Ministry serves as a basis for the development of an action plan and Graduate Program • Training Plan was approved by the Ministry of Energy, USAID and Partner Universities • 5-10 lecturers trained in the preparation of modern curricula; 	<p>Report on survey methodology. questionnaires</p> <p>Report on skill gap analysis.</p> <p>Action Plan</p> <p>Training materials. List of participants.</p> <p>List of participants, training materials</p> <p>Draft of curricula and study materials</p> <p>Workshop, TECI reports</p>

Program Outcomes	Program Expected Results (ERs)	Results Indicators	Records of Performance or Source of Data
<p>2.2 Technical management developed in the energy sector workforce</p>	<p>2.2.1 Scholarship and Internship program implemented ,students supported, and certificates and degrees issued</p> <p>2.2.2Outline of Competitive process for US scholarships</p> <p>Training Plan for Education Institutions</p> <p>2.2.3 Outline of Competitive process for Local Scholarship</p> <p>Education Program Sustainability Plan</p>	<p>Higher Education Scholarships awarded and managed for at least 55 students, including 3 in the USA and at least 50 in Georgia</p> <p>Selection criteria for US scholarship prepared and approved by USAID and the Ministry</p> <p>Relevant universities for US Scholarship Program selected</p> <p>Curricula for graduate program prepared and study course implemented in the selected universities in Georgia</p> <p>Cooperation agreements between Universities and Energy companies signed</p>	<p>List of Scholarship awards</p> <p>Semi-annual report on curricula, energy focused courses, and case studies developed per action plan</p> <p>Memo to US scholarship winners</p> <p>Memo to local scholarship winners</p> <p>Report on internship and post-training/degree placement process and funding sources</p>
<p>Outcome 3: Integration into European and Black Sea/Caspian Energy Markets</p> <p>3.1 Ministry of Energy and GNERC Commissioners familiarized with EU Energy Laws and Regulations</p>	<p>3.1.1 Year One Plan for GoG/GNERC participation in Athens Energy Community Treaty.</p> <p>Assessment of knowledge of the GoG Institutions about the Energy Community process</p> <p>Support through funding of he attendance of the Energy Community and other relevant meetings</p> <p>Year 2 Plan for Government Participation in Regional Energy Initiatives</p> <p>Assistance in attending of meetings and preparation of presentations</p>	<ul style="list-style-type: none"> • Plan was approved by the Ministry, GNERC and USAID • Up to 10 top staff members from the Ministry and GNERC participated in Athens Energy Community Treaty Meetings • Up to 6 key persons from the Ministry, GNERC staff participated in trainings in USA and EU organized by different donors/ International organizations, Regulatory Associations 	<p>List of persons attended the Athens Energy Community Treaty meetings; Presentations, working documents.</p> <p>Report on workshops and meetings.</p> <p>Drafts of presentation, meeting materials.</p> <p>List of participants</p>