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QUARTERLY REPORT 2ND QUARTER 2010

THE ENERGY CAPACITY INITIATIVE (ECI), CONTRACT NO.
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ON THE COVER: Kutaisi Akaki Tsereteli State University rector Mr. Giorgi Oniani giving an opening speech at “Energy: Regional Problems and Development Opportunities” International Scientific Conference in Kutaisi Georgia

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APRIL 1, 2010 – JUNE 30, 2010

**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 tenth 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 (EPMI) 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 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.

ECI has submitted its Draft Year 3 work plan to USAID for approval in January 2010. ECI is following the general outline of tasks presented in the current draft Work Plan and is in

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.

regular communication with USAID concerning timing of tasks and deliverables as the needs of the GoG change in this dynamic period.

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. The PMP has again been revised to align with the draft Year Three Work Plan and was attached to the draft work plan.

ECI has reported on PMP for Year 1 and 2 of the project in November 2009.

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 2008, 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. The site includes a brief description of the project and, more importantly, a description of the current activities being conducted by the project. ECI took the web site live during the first week in September 2008. 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. In addition the Energy On-line journal established by one of our Energy Issues grantees also provides a technical and education audience focused outreach for Georgia and the region as a whole. This grant project has successfully provided technical outreach to energy professionals in Georgia, Turkey, Armenia, Azerbaijan and Ukraine.

Personnel. In December 2008 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 quarter 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 2008, 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.

The selected grants were contracted and work commenced for the six awarded grants. All six grants projects are now finalized. The grantees have submitted final reports. Summary report on ECI's completed Year 1 grants projects reports was submitted to USAID in May 2010.

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.

“Highway Lighting Using Solar Power” final output was envisioned to be tender documents for Gori-Igoeti highway lighting using solar power however based on Ministry of Energy input and after benefit analysis, cost of solar lighting for this section of the highway proved not to be competitive compared to the traditional lighting systems at this point and it was agreed that tender documents will be prepared upon request from the Ministry of Energy.

“Development of Emergency Management Actions Plan and Regulatory Basis for Georgia Energy Sector” final report was submitted to ECI in February. The project results were expected to be development of legal, organizational and regulatory base for the emergency management system for Georgian energy sector. The final report of the project includes definitions and analysis of different emergency scenarios based on computer modelling, world experience in emergency situation management, actions plans for state and organization levels and draft legislative amendments and regulations for an effective emergency management. The Ministry of Energy of Georgia has reviewed the project final report and has acknowledged the importance of the project findings for the Georgian energy sector however ECI plans to further consult with the Ministry on possibilities and prospects of actual implementation of legislation regulation amendments based on project recommendations.

“Lemniscopter Turbine Driven Micro Hydro Power Unit” The goal of the Grant Project was to manufacture, carry out site tests and prepare the technical documents of the 3 KW installed capacity micro hydro power unit (“Micro Unit”) driven by turbine with three-sectional unconventional runner (“Lemniscate Turbine”). The novelty of the unit is in the trajectory of the runner blades (wings), which instead of rotating along a circular trajectory, draws the three-dimensional semi-lamniscate () shaped curve. Such a trajectory achieved by coupled cone toothed-wheels results in increasing the ‘useful’ part of the blades motion and, respectively, retrieves more useful power from kinetic energy of the flow which was proved during tests of the turbine on Aragvi River. The passport of the turbine has been prepared outlining the procedures of actions for inspecting the area of turbine installation, manual, instructions, assembly plan etc.

“Energy Online Magazine” The project is finalized and so far has issued two editions of online magazine Energy Online. Currently, online magazine Energy Online reviews following directions: power engineering – (hydro, thermal, power, renewable) – results of scientific studies and technological innovations; Overview of the world energy news; South Caucasus power engineering – research and technical projects, energy security initiatives; Alternative energy sources – theory, practice, ideas; Power facilities – transmission networks, oil and gas pipelines; Energy construction; Ecology, environmental impact and protection. Energyonline.ge. has become a source of information on energy and on the progress of research and technical aspects in the region. Constructive relations among region’s specialists in research and technical fields have been formed. In the future, the project will continue further working on development of the magazine and as well as additionally incorporating educational aspects into the website.

“Potential of the Wood Energy Resources of Georgia and their Effective Application” The goal of the project was to provide technical support for optimized use of Georgian forest resources in compliance with environmental requirements. The project team conducted an in

depth review of wood fuel resources in Georgia. Namely, the project developed a complete conceptual scheme of studying wood fuel resources considering objectives and priorities of the project by using system analysis of the issue. The final report of the project also outlines recommendations for the Ministry of Energy of Georgia, Ministry of Environment Protection and Natural Resources, Ministry of Finance and Ministry of Refugees and Accommodation.

“Cleaner Energy for IDPs” The project submitted a final report which incorporates pre-feasibility study providing estimation of necessary investments for the introduction of energy efficiency measures in IDP settlements, analyses energy consumption and savings after the introduction of certain EE measures, provides the cost-benefit analysis (Investment needed per measure per settlement; Energy saving (both kWh and GEL) per measure per settlement; Pay back period by measure per settlement; Net Pay back period by measure per settlement; Measure’s lifetime net monetary saving) for the selection of the most beneficial option. The report also outlines the results of a demonstration project in Teliani settlement after the implementation of EE Measures (replacement of sawdust stoves with efficient fire-wood stoves, replacement of incandescent bulbs with CFL’s) electricity consumption in Teliani in December 2010 in comparison with December 2009 was reduced by half.

Following four grants projects - Lemniscope Turbine Driven Micro Hydro Power Unit; Energy Online Magazine; Potential of the Wood Energy Resources of Georgia and their Effective Application and Cleaner Energy for IDPs participated in World Sustainable Energy Day on March 26, 2010 which was organized by Energy Efficiency Center Georgia within the world annual Sustainable Energy Week. The grantees presented project final results and participate in roundtable discussions.

In the previous quarter ECI completed the evaluation process of grants applications received within the second round of ECI’s grants programs covering a wide range of topics. The Technical Evaluation Committee consisting of ECI, USAID, and Ministry of Energy of Georgia representatives evaluated 52 applications. The shortlist of applications for grants awards was developed based on overall scores and interviews with selected applicants on questions which were brought up during TEC meetings. At the end of the 1st quarter, ECI submitted a final Grants award memorandum for the Second round of grants program to USAID, following grant projects were approved for awards and have commenced implementing the projects:

Co-evolutionary Resolutions in Energy

Project Name: Study of safety and security of High Dams in Georgia

At this stage the project is fully staffed and tasks assigned to different members of the team. The project team is currently working on overall outline of high dam security guidelines for Georgia in cooperation with relevant departments of HPPs in Georgia. For this purpose, the project has obtained coordinates and information on 39 dams in Georgia which has been classified according to their risk factors. The project will now work on outlining actual security risk factors on 19 of these dams which will include accidents on dams, technical problems, seismic and natural disasters etc. Further, the project will develop risk prevention methods and a monitoring system. At the same time, the project team has been conducting a comprehensive research on international experience dealing with safety issues for hydro power stations. The project in cooperation with ECI is in the process of locating/assessing

the measuring equipment to be purchased within the project (water pressure and water flow metering devices). The final decision of the internal tender on the equipment will be made shortly.

Karenergo-2

Project Name: Study of wind energy potential including a pilot project (wind turbine) in Gori region

The project team has assembled two meteorological towers for measuring wind parameters which are already installed near village Skra. The towers will be moved several times before the final measurements are studied in order to be able to evaluate the optimal location for the pilot project – grid connected wind turbine. Memory cards in these two towers register data which are then transferred to Riso computer program which will allow the team to access the data and determine the structural characteristics of wind power near Skra. The computer program which allows analyzing the data recorded by the towers has been updated. At the same time, the project team is continuing research on available small capacity wind turbines on the market. There are not many companies who manufacture small capacity wind turbines. The project has obtained information regarding turbines manufactures and sold in the US prices of which exceed the amount given the project budget. The team has searched alternate cheaper options and the decision on purchasing the wind turbine will be made soon.

Science and Energy

Project Name: Development of Energy Online Magazine

The project is continuing to further develop organizational and technical aspects of the project. The main aspect of the project development at this stage is building a sustainability plan which mainly includes promotional activities in Georgian energy sector as well as in the region. The team is in the process of establishing relations with energy companies and educational institutions. With the help from ECI, the project is working on incorporating educational aspect into energyonline.ge and is currently negotiating with International School of Economics at Tbilisi State University on publishing students' Master's theses who graduated this semester with a concentration in Energy Economy. At the same time the project team is continuing preparation for an international e-conference and is planning on approaching Georgian Scientific Foundation for a possible co financing of the e-conference. New contacts have been established in this regard, with Black Sea University in Trabzon and Engineering department at Rustaveli University. The project is currently receiving works for the third edition of the electronic journal

Association of Energy Engineers of Georgia

Project Name: Alternative energy resources for Stepantsminda (Kazbegi)

At this stage of project implementation, the team has already met with Kazbegi municipality governor and deputy governor, Mr. Gocha Malania and Mr. Viktor Sujashvili as well as has again discussed the project with the Deputy Minister of Energy Ms. Valishvili who have promised full support in implementing the project. Prior to the first work trip to Kazbegi, the project team developed a questionnaire which outlines the areas and issues of importance in priority orders in energy supply of the region. The first energy audit of a building

(gymnasium) has been performed and a comprehensive study of the region's natural gas supply and consumption has been finalized. Based on the acquired information the team is working on electricity supply and consumption analysis of the region. All acquired information is entered into a database of electricity and gas consumption for 2008, 2009 and 2010. Seasonal graphs of consumption will be later be used in developing a scheme of using alternative energy resources in the region. Apart from this, the team has developed an energy audit calculation-analysis scheme which will allow calculating savings as a result of introducing potential alternative energy resources in the region.

Georgian Geothermal Association

Project Name: Implementation of Geothermal Heating Pilot Project in Khobi

The project has finalized the first stage of rehabilitating the thermal power plant building. Two iron doors and 2 windows have been manufactured in Tbilisi and transported to Khobi at the site. Rehabilitation of the building is completed. The team is on a final stage of rehabilitating the geothermal well itself. At the same time the team is working on procurement processes for rehabilitation of the heating system in the hospital and located and selected the vendor for necessary parts (polypropylene pipes etc.). A map with detailed descriptions of works to be completed has been completed with the help from hospital administration. Calculations are being made on CO₂ emission reductions as the result of the project based on methodology developed by the UN Intergovernmental Panel on Climate Change (IPCC). Apart from this, a comprehensive study on region's geothermal resources has been finalized.

Association – Efficient Use of Georgia's Energy Resources

Project Name: Study of an energy status and a potential of an administrative unit for development of an energy passport (Dusheti region example)

The project team has completed climate and hydrological maps of Dusheti region as well as gathered data on solar and wind potential in the region based on updated cadastres of solar and wind powers. During April and May, the team developed a study of hydro potential of every river in the region. Later, the data will be included in a scheme of utilizing the hydro potential existing in the region the methodology of which has been developed. At the same time the detailed map of Dusheti region is being developed with existing industries on sites. The project has met with number of representatives from local governments in the region as well as ECI grantee NGO Karenergo 2 director Mr. Zedgenidze who is the author of Wind atlas of Georgia. Also, the meetings have been held with local branches of Socar Georgia and Energo-pro Georgia who will provide information on natural gas and electricity distribution networks in the region for further analysis. The project team has toured Magarokari, Barisakho and Ukana Pshavi districts of Dusheti region with a purpose of studying the existing energy situations in these locations. Future tours of the rest of the region will finalize the on site studies of the supply/consumption characteristics of the region.

Union "Spectri"

Project Name: Students for Energy Efficiency

After officially presenting the project to the target groups of students and other interested individuals, the project now has a list of potential volunteer students. The selection of these students was made from Energy Engineering Department of the Kutaisi State University,

however several requests were made from students from other departments who will also be allowed to participate in project activities. The project director has also met with the dean of Journalism department and an agreement has been reached on cooperation. The project team will organize a special training course for student journalists in November. Currently, materials for TV programs are being developed which will be aired on a regional TV station in western Georgia on Energy Efficiency in late June. On June 19th, 2010 the first training-seminar session was held on volunteerism for local students from Kutaisi State University. As a result, the project has 21 registered volunteers who will be participating in awareness raising and other activities within the project.

Caucasus Environmental Foundation

Project Name: Strengthening women in action for sustainable energy development in Gali and Zugdidi regions.

The project is fully staffed and functioning. The equipment for the office has been purchased and communications established. The project team held the first meeting in Zugdidi. The purpose of the meeting was to meet potential Women's initiative group members. Project assistant Ms. Gvaramia, who works in Zugdidi, gathered up to 20 interested women from Zugdidi and Gali –among them, students from Javakishvili University and ESM Zugdidi branches. As a result of the meeting, Committee was formed consisting of eight members. Committee members have been given an assignment of mobilizing local population for their participation in questionnaire distribution and seminars. Next step of the project is introducing solar powered fruit dryer to local population and preparation for seminars.

World Experience Georgia

Project Name: Estimate of Shale Gas Potential in Georgia and Development of Recommendations for its Utilization

The project has already started working geological consulting firm "Hydro Dynamics Group, LLC" which has been contracted within the project. The project has presented a report on review of shale gas exploration and production technologies, technical, economic, environmental, legal characteristics. The report which also includes input from "Hydro Dynamic Group" discusses the current state of shale production industry and technology in the world and reviews the issues in relation with shale gas exploration in Georgia. Detail discussions on shale gas production history, technologies and economic efficiency analysis will now be reinforced with geological data. The request for data (petrological, petrophysical, mineralogical, geochemical and etc) has been made at relevant institutions – Ministry of Energy and geological funds, Oil and Gas Corporation. The meeting was held with local geologists with a purpose of introducing the findings of the project and discussing potential contributions to the project from them. Geological data provided by this group will be presented to Mr. Mike King from Hydro Dynamics Group who will be in Georgia from July 19 through July 26 to work with the project on developing the draft TOR for feasibility study on shale gas exploration in Georgia.

During the next quarter, ECI will continue monitoring and managing nine grants projects and providing administrative and other support as necessary.

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 of 2009 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. During the 4th Quarter of 2009 the SYNERGY project held a data and process development meeting with other regional participants here in Tbilisi. Two of the ISET graduate students in their ECI funded graduate degree program are participating in the SYNERGY MARKAL/TIMES modeling effort. ECI is waiting for the formal SYNERGY project report for Georgia to be issued before assessing next steps on this task.

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 Valishvili 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 2009. Also, 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. Apart from this in December 2009 ECI supported the development of a Center of Excellence for the energy and education sectors that is intended to provide a sustainable medium for dialog

and cooperation between the educators and the consumers of the educated energy professionals – the energy sector companies and government agencies. A workshop was held with educators and energy professionals who represented the agreement parties and the Ministry of Energy where a short, medium and long term strategy for the center was developed. To foster a sustainable demand driven assistance program for the Georgian energy Sector ECI will be working to provide further assistance related to Sub-task 1.3 and 1.4 through the Center of Excellence. During this last quarter ECI assisted in the conduct of a series of planning meetings for the Center of Excellence.

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. Kasprowicz'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. Kasprowicz 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. Kasprowicz interviewed and assessed the Ministry or Energy for this sub-task. Mr. Kasprowicz 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. After receiving review input on these reports from USAID ECI prepared and submitted to USAID single overall assessments final summary assessment report which summarized and integrated the main points presented in the draft individual assessment reports and to which the individual assessments were attached.

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. ECI has awarded four grants to four Georgian Universities for development of advanced degree energy management oriented programs and concentrations. The Universities receiving the graduate program development grants are:

1. Georgian Technical University for its development of a ***Concentration in Energy Demand Side Management***;
2. International School of Economics (ISET) at Tbilisi State University (TSU) to develop a ***Concentration in Energy Economics***;
3. Akaki Tsereteli State University in Kutaisi to develop a new Master's degree program in ***Power Industry Technology and Management***; and
4. Grigol Robakidze University (a private university) to develop a ***Concentration in Energy Management***.

In this quarter, all four ECI grantee universities have submitted third quarterly reports for the projects which discuss updates/processes of curriculum development and education processes:

Grigol Robakidze University – Energy Management Concentration

Syllabi for the courses within Energy Management concentration have been developed. The courses are part of Master's program in Business Administration at Grigol Robakidze University. List of lectures with corresponding professors who are leading the courses is as follows:

1. Energy management – David Sikharulidze; Vasil Kikutadze; Ekaterine Maglakelidze;
2. Renewable Energy – Zuarab Gurgenzidze
3. The foundation of Energy Technology - Tengiz Museliani
4. Energy Economics and Policy – Shota Murgulia, Mikheil Gogatishvili
5. Energy and Environmental Law – Slava Phetelava, Tamar Gamsakhurdia
6. Project Management – Akaki Tsomaia
7. Electric-Power Markets and Their Regulation – Nugzar Beridze

Literature purchased within the project was distributed among selected professors, one of them "Energy Management Textbook (Barney L. Capehart., Wayne C. Turner., William J. Kennedy. Guide to Energy Management. Sixth Edition, 2008, The Fairmont press, Inc.). was translated and is currently being edited by Mr. Davit Mchedlishvili (Telasi Financial Director).

Reading and studying material which was prepared based on the purchased literature was distributed among concentration students. The students of the concentration are Grigol Robakidze University Master of Business Administration program graduates who will be receiving a certificate in Energy Management upon completion of the course.

Since the state exams for those who wish to continue education on a Master's degree level, are held in Summer, Grigol Robakidze University has commenced advertising for this concentration in this quarter.

Kutaisi State University –Power Industry Technology and Management Master's Degree Program

Kutaisi State University has completed the first stage of their facility and curriculum development program under the project. The rooms dedicated to the new Master's degree program have been renovated (with co financing from the University), computer lab and library are equipped with necessary equipment/furniture. The syllabuses in following courses have been developed:

- a. Power Industry Technology
- b. Alternative Energy Sources Power Engineering
- c. Energy Efficiency and Energy Saving Technologies
- d. Energy Enterprises Management
- e. Energy Regulation fundamentals
- f. Energy Policy and its Legal Foundations
- g. Project Design and Management
- h. Power Markets and their Management
- i. Energy and Environment

- j. Energy and Society
- k. Energy Security

The complete curriculum of the Master's degree program in Power Industry Technology and Management is finalized and includes program goals, expected results and competencies of Master's degree holders, preconditions for admission to the program and job placement opportunities for graduates, curriculum program layout (list of academic subjects, number of credits, required and elective subjects) and brief descriptions of each discipline. A presentation of the new Master's degree program layout was held where Project Director Mr. Omar Zivzivadze presented the program to representatives of Kutaisi State University and Georgian National Water and Energy Regulatory Commission (Commissioners I. Kavtaradze and Z. Gabeliaia, Head of Electricity Department – Mr. N. Beridze, Advisor to the chairman – Mr. D. Chomakhidze).

The university conducted a scientific conference: "Energy: Regional problems and development opportunities" during May 21 – 22, 2010. The university published a call for scientific works to be presented within the conference and published these presentations. The conference publication is attached to this quarterly report.

With a purpose of advertising the new Master's degree program at Kutaisi State University for a new academic year, an article was prepared on Power Industry Technology and Management Master's degree program which was printed in "Imeretis Moambe" (Imereti Messenger) newspaper in April. The project team has also held a presentation session for existing students at ATSU especially targeting Bachelor's degree students at mathematics and economics departments as well as female students of the university in order to advertise the program among them.

International School of Economics at TSU – Energy Economics Concentration

ISET started classes in Energy Economy concentration in fall 2009 semester. Two of the ISET students are participating in the SYNENERGY project MARKAL/TIMES modeling program data collection, entry and assessment. ISET is also in the process of negotiating with the First Deputy Minister of Energy of Georgia on holding a lecture at ISET which will also be open to GUT, Kutaisi State University and Grigol Robakidze University students and professors.

ISET organized and hosted a lecture on "General overview of energy sector of Georgia, current and upcoming processes and impact of August war on Georgian energy sector". The lecture was given by the First Deputy Minister of Energy of Georgia Ms. Mariam Valishvili and was attended by students and professors from ISET, Georgian Technical University, Grigol Robakidze University and energy sector professionals.

Georgian Technical University – Energy Demand Side Management Concentration

GTU continues to work on renewal of existing library material, obtaining, translating and processing new foreign textbooks which have been purchased within the project, developing new methodical instructions and manuals, obtaining modern computer software, equipping technical lecture room with contemporary equipment, which will be used for conducting lectures and student testing, as well as trainings and internet sessions in an interactive way.

An internal work plan has been developed for the heads of Energy Engineering and telecommunications department directions. The team is currently analyzing the existing master's degree program in Energy management at GTU and considering possibilities of any changes in the program or using some of its existing disciplines as parts of new Energy Demand Side Management concentration. At this stage, two new disciplines have been developed which will be included in the new concentration: Management of energy demand side requirements and Renewable energy technologies.

ECl 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 energy and educational professionals. The purpose of this workshop was two fold. The first was to expose Georgian energy professionals and educators 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 ECl. 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 ECl 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 leaning system test in cooperation with the Engineering and Professional Development Department of the University of Wisconsin.
- Conducted curriculum development support meetings with the four Universities and assisted them in selection of course development and conduct reference materials.
- Attended the highly successful Akaki Tsereteli State University's program introductory presentation with the USAID Mission Director, E&E Office Director and our project COTR.
- Conducted an interactive workshop on "Strategic Planning" in Gudauri, Georgia where signatories of the Memorandum of Understanding (four universities - *Georgian Technical University, International School of Economics at Tbilisi State University, Akaki Tsereteli State University, Grigol Robakidze Universit* and four companies - *JSC "Telasi", Georgian State Electrosystem Ltd., Electricity System Commercial Operator Ltd, Georgian National Electricity and Water Regulatory Commission*) on creation of *Center for Excellence in Energy Education, Training, Applied Research, and Information* participated in developing a strategic plan for the CEE. The memorandum of understanding between these parties was signed on December 17, 2009.
- Conducted an update meeting with ECl grantee universities and Georgian energy sector organizations. Discussion was held with participation from energy sector company representatives on issues and achievements related to new energy programs, local scholarships, goals, problems and future cooperation between companies and universities.
- Conducted a two day interactive workshop on "Developing a Business Plan" in Sighnaghi, Georgia. Participants included representatives from Memorandum of Understanding signatory bodies as well as the Ministry of Energy, Energo-pro, ECl and USAID. A primary objective of the workshop was to train participants in

developing a business plan and to discuss business-development issues for energy services in Georgia.

- Met with all four grantee (Georgian Technical University, ISET, Grigol Robakidze University and Kutaisi State University) universities to check their progress and assessed their further needs for program development.
- Met with Energy Economy concentration and Energy Management students at ISET and Grigorl Robakdize University and assessed their learning experiences and their future plans in the energy sector.
- Assisted Kutaisi State University in organizing an international conference on “Energy: Regional Problems and Development Opportunities” which was organized and held within ECI’s “Power Industry Technology and Management Master’s Degree Program” grant project in Kutaisi on May 21 and 22, 2010. The scientific conference was highly successful with participation of more than hundred professionals and presentations of up to seventy scientific works in sections of: Electrical engineering and power industry technologies, Environment and renewable energy resources, Information technologies in power industry, Energy economics and management (Attachment 2). Apart from the concurrent sessions of the scientific conference, on the second day of the event, roundtable discussion was held on “Higher and professional education in energy sector: current state, problems and cooperation opportunities”. ECI grantee universities presented and discussed respective higher education programs funded by USAID within ECI project as well as outlined future and current cooperation plans.

In June 2010, ECI submitted to USAID Task 2: Higher Education Programs to supply a professional workforce for the energy sector semi-annual report which incorporated energy education program design and implementation updates as well as training and faculty development programs implemented by ECI.

In the next quarter, ECI will continue working on supporting grantee universities in finalizing curriculum development as well as tracking and selection of local scholarship program participants. Dr. Nezhad will arrive in Georgia on July 26, 2010. His activities during this trip will include:

1. Conduct two workshops on “*Practical Research Methods for Managers*,” one in Tbilisi and one in Batumi. The participants will include teachers, students and professionals in the energy sector;
2. Meet with the three U.S. scholarship recipients and to assist them in preparing their research proposals for their Master’s papers;
3. Meet with CEE members to discuss the draft business plan;
4. Assist the members of the consortium in designing a professional certificate in energy management & policy;
5. Meet with the four grant-receiving universities to check their progress and to assess their further needs for technical assistance.

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.

- Mikheil Zibzbadze from GSE to Study "Management of Technology" at the university of Minnesota;
- Marina Arabidze from GOGC to major in Environmental Studies with a Certificate in Energy Analysis and Policy at the University of Wisconsin, Madison; and
- Nana Gurgenidze from MOE to study "Energy Management" at New York Institute of Technology.

In this Quarter, ECI continued to assist and monitor the scholarship winners living in the USA who have been actively involved in classes and have now completed the courses and exams for spring 2010 semester. Scholarship recipients are now in Georgia for summer vacations. All three are expected and have started sharing their US experience with their colleagues and others interested in their activities. Scholarship recipients are working on developing a research proposal for their Master's thesis works. ECI received transcript records for these individuals in this quarter which showed that all three scholarship recipients are again in excellent academic standing this semester.

At the end of summer vacations US scholarship recipients will return to their schools to start their Fall 2010 semester classes for which they have already been registered. In the coming quarter, ECI will assist US scholarship recipients with visa procedures for the second year of their studies in the US.

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, Georgian 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.

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 4nd 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 conducted an assessment of the laws and regulations regarding the energy sector in support of the GoG in understanding the gaps that may exist between Georgian Laws and Regulations and those of the Energy Community Treaty. The report with comparative analysis of these issues was submitted to USAID for review and comment during last quarter

and review input was received. ECI incorporated and addressed provided comments and submitted the final version of the report in this quarter.

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.

GNERC 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 GNEWRC. As USAID noted in the scope of work for ECI, "GNERC 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 GNEWRC that it would be physically relocated to Kutaisi. Now that the move is complete, GNEWRC 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 GNEWRC 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 GNEWRC'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 1 Grants follow-up. In the process of defining the energy issues grants program it was decided in cooperation with USAID that the grants should be divided into two phases to insure that emerging needs were able to be addressed and to potentially extend highly valued phase one grants in a second round of funding. The ECI project will not be able fully follow-up on these second round of grants due to the end of the contract potentially being before the end of the work being conducted in second round of grants. In addition a number of high value grant proposals from phase one and potentially from phase two will not be able to be funded. Consideration for additional grant funds should be made following the review of the phase two grant proposal evaluations.

Limitation on Support for Task 2 Education Program follow-up and Internships. The project contract and funding anticipated this element of the project to have designed and developed local graduate degree programs in six months with a program start up for the fall semester of 2008. This expectation was not realistic as the development of graduate level curriculum and the approval process for this curriculum can take over a year or more. ECI conducted the assessments and surveys of Task 1 in order to properly define the need and expectations of the educators, energy companies and students for such a graduate degree program. The conflict with Russia in 2008 caused all of these assessments and surveys to be delayed and this impacted the schedule for the development of the graduate degree programs as well as the US and local scholarship components of this project task area. Consequently the planned educational program follow-up and support for internships will not be possible as the graduates will not exit their programs until after the end of the current ECI contract.

ECI has assisted in the development of a Center of Excellence to provide a sustainable element linking the needs of the energy sector companies and government agencies with the universities supply them with energy professionals. However this center will need logistical and administrative support during its setup and initial operation and the ECI project does not have the funds budgeted to provide this support and the ECI project will end before this Center of Excellence is fully realized.

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 prepare 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 Three Work Plan, the program anticipates the following activities during the third quarter of 2010.

Overall Program

Gain approval for ECI Year Three Work Plan.

Task 1 Policy Analysis and Dialogue

Subtask 1.1: Independent Policy Analysis through Grants

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

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 third quarter 2010, through the use of the ECI Project website and the Energy On-line 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

With USAID approval, and where necessary additional funding 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

With USAID approval, and where necessary additional funding 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.

Complete curriculum development for the two graduate degree/concentration programs.

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 include proposals for 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 2010 Energy Community Meetings.

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 third quarter of 2010, ECI expects the following short-term advisors to travel to Georgia:

| Name | Month(s)Expected | Purpose of Trip |
|----------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hameed Nezhad | July 2010 | Continue his work on Task 2: Higher Education Programs to Supply a Professional Workforce for the Energy Sector. |
| Lejla Uzicanin | September 2010 | Provide expertise in assisting the GoG in EC pre membership activities plan for participation in regional/international initiatives under this Sub-task |

TRAVEL OF GEORGIA OFFICIALS TO REGIONAL EVENTS OR EUROPE

ECI expects to continue supporting key Georgian officials' attendance at the Energy Community meetings during the next quarter.