



GEORGIA

FOLLOW-ON REPORT TO
INVESTMENT SYMPOSIUM:
HYDRO POWER DEVELOPMENT IN GEORGIA

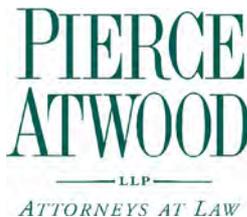
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I. INTRODUCTION AND SUMMARY

A. Background

This Report has been prepared following the “Investment Symposium on Hydro Electric Power Development in Georgia” held in Tbilisi, Georgia on 21 May 2009. It is the culmination of a week of extensive meetings with numerous key participants in the Georgia power sector. A list of the participants with whom meetings were conducted is attached as Appendix A. At the outset, the authors wish to express their deep appreciation for all of the time that the various parties spent with us during our work in Tbilisi. We are especially appreciative of all of the time that Deputy Minister of Energy, Mariam Valishvili, devoted to this Project.

Our assignment was to review the ambitious proposals to attract private sector investment in Georgia for the development of new small, medium and large scale hydro power projects that would sell their output principally into the Turkish domestic market. The authors were asked by USAID and AEAI to bring their perspectives as consultants and lawyers who have worked on private sector power development globally and to apply this learning to the current investment program in Georgia.

The basic transaction model is as follows: Georgia has identified in approximately 80 new hydro power generation sites, ranging in size from small to very large, that appear to have the requisite water flows and other characteristics for profitable and technically feasible power generation. Georgia has identified two sources of demand for this additional power. The primary market is Turkey, where

annual load growth historically has been among the fastest in the world and is projected in the future to exceed available supply, existing and planned. Turkey is typically a summer peaking market, where the greatest demand occurs in warm weather months. Turkey would be the largest market for new hydro power generation. Georgia itself is a winter peaking load, and while it has adequate domestic power generation in summer months, in the winter Georgia needs to import power and/or generate additional electricity from costly thermal plants. Thus, a secondary market would be winter season sales within Georgia. A new 500 kV/400 kV line and back-to-back converter station (“new line”) would be constructed and dedicated solely for export of the new hydro power to Turkish markets, with use of the new line to be priced on a cost of service basis and with access and capacity reserved to the new hydro power as it is constructed and enters commercial service. Until the new hydros fully utilize the new line, excess line capacity would be used for transit purposes for supplies originating in Russia and Azerbaijan, and, thus, transit revenues would help pay for the line. Domestic customers in Georgia would not support the line through added tariff charges.

It is against this backdrop that we have prepared this Report and offer our observations and recommendations.

In short, it is our view that Georgia is blessed with an abundance of renewable, carbon free generating resources that should have commercial, strategic and environmental value to investors. Especially in light of current considerations globally,

in the Caucasus Region and the European Union, with respect both to greenhouse gas emissions and global warming and to security of supply concerns, the ability for investors to develop new hydro electric resources, secure transmission of the new power to markets and to access creditworthy buyers, should prove to be attractive.

Georgia has already done a great deal to identify and market this investment potential. Plans to finance, construct and energize the new 500 kV/400 kV line to facilitate export to Turkey, pursuant to the Black Sea Energy Transmission Project, are critical and evidence of the Government of Georgia's firm commitment to move forward. Liberalized licensing regimes, competitive markets within Georgia in terms of wholesale power, and an established legal and regulatory structure for the sector, including implementation of an Energy Law that defines the roles of the Ministry and the regulator (the Georgian National Energy and Water Regulatory Commission ("GNEWRC")), and the establishment of other participants in the power sector, including GSC (the Georgian State Electro-System, as technical operator) and ESCO (the Electricity System Commercial Operator, as market operator) are all positive developments that investors should find appealing.

Thus, the Georgia program seems appropriately conceived and supported by applicable legal, regulatory and sector function structures.

B. Overview

That said, there are a number of suggestions and comments set forth below that we recommend be incorporated to help enhance Georgia's efforts to market these opportunities and ultimately attract strategic, high quality investors.

Investment can be encouraged, but it cannot be compelled. Capital is both mobile and global. As the current economic difficulties end and greater private sector capital flows recommence, Georgia needs to position itself to be at the top of the list for attracting the capital of investors and lenders who are active in the global power generation sector. There are external and internal factors that will affect investors' risk assessments of new hydro electric power projects in Georgia. Some of these factors are within Georgia's control, some are not. In essence, it is our recommendation that Georgia build on the materials, decisions, and commercial and engineering data that it has already assembled in order to create a world class "Deal Book," worthy of global investment bank advisors, that is specifically targeted to the kind of investors Georgia seeks.

Georgia already has created two websites designed to convey information about these investments (www.minenergy.gov.ge; www.georgiahydroinvest.com). Both of these sites are a good platform for conveying additional information to potential investors. Georgia should use the internet, electronic media and similar tools to create a current, cutting edge and interactive environment where investors can obtain up-to-date information, post questions and receive prompt, clear and supportive answers.

In addition, we recommend that, in connection with preparing the Deal Book, Georgia formally identify a senior official in the Ministry of Energy who can act as the “point person “and champion for investors and who is responsible for day to day management of the program and for responding promptly to investor inquiries.

Georgia also should target specific investors for the Turkish export market, assemble a first class team, and visit the investors in person to make the presentations. Demonstrated commitment and enthusiasm from high level government officials, current investors and regulators should underscore for investors the seriousness and commitment of Georgia. The Ministry of Energy has been extraordinarily open and accessible to investors and participants in the power sector. In our experience, this level of openness and transparency is unusual, a very positive environment, and another fact by which Georgia can distinguish itself from other locations seeking private sector investment in power generation. The combination of continued, high level government interaction with potential investors, an informative Deal Book combined with a road show and personal visits to targeted investors, and a user- friendly, interactive, informative website can help set Georgia apart and make it a desired destination for capital flows in the power sector.

We approached the overall concept of development of new hydro projects in Georgia for export markets with in the context of three core business segments: (a) the process of obtaining, and the cost of developing, new hydro power projects in Georgia; (b) transmission of power across the proposed new 500 kV/400 kV line through Georgia

to export markets (Turkey); and (c) the market situation in Turkey, the ultimate market for the vast majority of the new investment. In each category, we identified issues that we suggest the Government of Georgia government address clearly in its various media outlets, including the website, PowerPoints, Deal Book and public presentations. The balance of this Report discusses each of these three categories, as well as additional considerations that we hope Georgia can continue to consider as it moves forward with this investment opportunity.

C. Summary of Core Recommendations

- Develop a world class Deal Book, similar in quality to those prepared by global investment banks, that anticipates and responds to likely investor questions
- Utilize up to date website presentations to communicate real time information to potential investors
- Dedicate a senior official at the Ministry of Energy as the formal point person and program champion for investors to contact
- Provide a systemic analysis of the Turkish market, either directly or through links to other resources
- Confirm the schedule, costs, tariff methodology, access and congestion protocols for the new 500 kV/400 kV line, and provide frequent updates on this project; discuss potential transit usage on the new line
- Clarify the process and timetable by which developers of the new hydro power sites will be selected; quantify the costs and process for interconnection and access to the existing Georgia transmission system; update the market rules
- Address other issues of likely interest to investors, such as the ease of doing business in Georgia; the role of the Regulator; contract enforceability; availability of political risk insurance
- Identify potential Turkish investors; take a well-prepared road show to them

II. NEW HYDRO POWER PROJECTS IN GEORGIA FOR THE EXPORT MARKET

A. Pre-Feasibility

Through its own initiative and with the assistance of donors, Georgia has created an inventory of available sites for new hydro power project development. As an initial screen, investors will want to know the cost, hydro power characteristics, location, annual water flows, estimated annual output, distance to transmission interconnection, key environmental and social concerns, and related pre-feasibility characteristics of each site. Materials on the existing websites identify the sites and contain some, but not all, of this information. To the extent such information already exists, it is our recommendation that it be made available to investors. We suggest that websites and PowerPoints contain click-throughs or links to any underlying reports that may have been prepared by the Government of Georgia or by third parties on behalf of the Government containing this information. We do not recommend that the Government, either directly or with donor assistance, commit to preparing extensive new feasibility studies on each site. The cost and time would be significant, and, in any event, each developer will want to prepare its own feasibility study. Even if the developers do not feel compelled to do so, the lenders will insist on an independent, third party feasibility study as a condition of loan funding. Thus, additional feasibility study work at this point would likely be duplicative of work that will have to occur in the future. Marshaling all of the available cost estimates and site data, however, in one central,

easily accessible location is important. In addition, we understand that the Government is considering grouping some of the proposed hydros together as a package. To the extent these packages can be identified, the Government should do so in its public materials and explain its rationale.

B. Selection Process

During our meetings, it was not clear what selection process the Government of Georgia will use to award the development rights, and underlying real estate, hydro electric, and related environmental rights and permits for the selected investors. It is our understanding that some of the projects may be awarded through a competitive tender process conducted in conjunction with accepted international tendering norms. That is, specific projects would be identified for tender; criteria would be posted; potential bidders would be able to access the information through the internet, a virtual documents room, and through published materials; a deadline would be established for submittal of bids; bid bonds would be posted; a review and selection committee on behalf of the relevant Ministries would then review all bids in conjunction with the published criteria and award each site based on the bidder that, through the pre-established scoring system, proposes the best overall value on the project.

Other sites may be subject to a more negotiated process whereby initial proposals are submitted, competing proposals can subsequently be submitted, and the Government will ultimately decide who is awarded the site on the basis of perceived best overall value.

In our experience, private developers need maximum clarity with respect to the selection process, when a state-owned or state-controlled resource is being made available for private sector development. Georgia can certainly reserve to itself the customary rights and authorities to reject bids. Investors will be less eager to compete for projects if the selection process lacks clarity, if the process appears to be subjective, if it looks as though the selection committee can change evaluation criteria or alter weightings in the bids after the fact. There is considerable cost involved for any investor to investigate a new hydro power site, determine initial feasibility, estimate costs, confirm transmission and access, assess ultimate market and customer risks, and identify potential funding sources, cost of capital, management and employment. The investor will not make this substantial investment in costs (that can only be recovered if it wins the bid) if, in turn, the investor believes that the selection process lacks clarity, objectivity, reasonable criteria or timeliness. It is our recommendation that the Government establish clear and reasonable processes by which developers will be selected, and a timeline for bids and selection.

C. Third Party Access, Internal Transmission and Market Rules

Even before accessing the new 500 kV/400 kV line to be built for the export market, most, if not all, of the new hydro power projects will need to access the existing internal transmission network within Georgia. Investors will want to know (and be able to access and review for themselves) the status and content of existing market rules governing third party access, transmission capacity allocation, dispatch protocols, cost

of interconnection, cost of transmission, and other ancillary costs associated with the movement of electricity across the internal transmission system. Investors will want to know how access is prioritized, what happens during congestion periods, and related and equally germane operating questions.

During our meetings, we were advised by several parties that the existing market rules need to be clarified and amended. The current market rules, we were informed, have been in place for several years, and have been amended frequently, in order to adapt to changing conditions within Georgia. As a result, the current rules lack clarity in certain areas, appear to be contradictory in others, and generally need to be reviewed, rewritten, and repromulgated. It is not unusual to find that market rules in a particular country need to be upgraded after a period of several years and multiple amendments. Georgia thus is not an exception in this regard. If, however, the market rules lack clarity over issues that will be important to independent private investors, including such issues as third party access, priority and capacity reservation on the transmission network, cost and tariff for services, and overall line capacity, then the rules must be amended.

We further note that we were advised by the Deputy Minister of Energy that there is a working committee in place addressing market rules. This is a positive development, and we urge that clear, Georgia-specific and appropriate market rules that are otherwise consistent with international best practices be proposed and adopted as soon as possible and made widely available for review by potential investors.

Presumably, as part of the market rule revision process, existing stakeholders, including existing private sector investors, will be invited to participate, and their views will be implemented to the extent practicable. Some of the best champions for new investments are existing investors who believe that the investment climate has been appropriate and that the host government and related institutions have treated them fairly. Georgia already is the beneficiary of several private sector investments in the power sector, and it should look upon these investors as key allies in its efforts to attract additional investment. Including investors in the stakeholder process to develop new market rules is one way to capitalize on this existing benefit.

Costs associated with local transmission are important. The investor will ultimately look at the likely sales price to the ultimate buyer (in Turkey), compare that price against its total cost of production and delivery of the power, including the capital cost of the new hydro, existing internal transmission and interconnection costs, transmission costs across the new 500 kV/400 kV line to the Turkish border, transmission costs and interconnection costs, if any, from the Turkish border to the Turkish customer, and other costs, so as to determine if there is a sufficient margin between the sum of all of these costs and the expected or contracted price in the Turkish market. Thus, clarity on the transmission tariff structure and costs is a key component.

D. New Transmission Line in Georgia

Georgia, in conjunction with EBRD and KFW, appears to be making substantial progress toward the ultimate design, construction, and energization of the proposed

new 500 kv/400 kV energy transmission line. The new transmission project would include a new 500 kV line, a new 400 kV line, and a back-to-back converter station built for the sole purpose of facilitating export of hydro power production, especially new hydro power production, from Georgia to Turkey. Based on our meetings, it is our understanding that the Government, the Ministry, and GNEWRC are currently contemplating adopting a “cost plus” tariff methodology for use on the new line, with one common tariff covering the 500 kV line, the 400 kV line and the back-to-back converter station. It is our further understanding that the market rules will be amended to make clear that new, renewable hydro power production has priority on the new line and, furthermore, that the cost of the new line will be paid for entirely by users associated with the export market or with the international transit market. Costs will not be allocated to domestic retail customers.

Clearly, moving forward with the development of the new line demonstrates Georgia’s commitment to export markets, and the new line will, upon completion, provide an essential facility without which the hydro power would not be developed or the export market served. There are several issues regarding the new line about which we believe investors will seek further assurances and clarity. These issues generally fall into the following categories:

1. Timing

We are advised that, currently, the new line is expected to begin construction in the late third quarter or fourth quarter of 2009 and be completed by the end of 2012.

This is an ambitious schedule, especially in light of the fact that, again, consistent with the information we were given at our meetings, design drawings have not been completed for the line, nor have construction tenders been proposed or issued.

Investors will need assurances that the new line will be complete and ready for use by the time their hydro power projects enter commercial service. Given the relatively long lead time to identify, award, and construct new hydro power projects, slippage in the date from late 2012 to a later, but still near term, date likely would not be a serious impediment. A greater challenge would be loss of investor confidence in the ability of the Government to manage the start of construction and the completion of the new line.

It is our recommendation that only realistic dates be circulated in connection with the new line. If, in fact, genuine start of construction can occur in the fall of 2009, then it is appropriate to publish that date. If, however, it is more likely that construction will not start until a later date and that completion will not occur until, say, 2013, then the Government should be forthright. Investor confidence in the capacity of Government to accurately predict and manage completion of the new line is important. Otherwise, investors will be reluctant to spend on capital construction. We appreciate that our information concerning the status of design drawings, the time required to tender for selection of an EPC contractor, and the time required to construct the new line may be inaccurate; however, these are precisely the kinds of questions that an investor will ask and are thus precisely the type of information that should be included on the websites, in the Deal Book and in any other materials that the Government prepares. Also, it

would be appropriate on the websites to have a periodic update on progress regarding the new line. A dedicated link on a website to developments on the line could be a benefit.

2. Cost

While the Government has outlined the general principals associated with tariff and cost recovery on the new line, investors likely will have more detailed questions that will have to be answered. For example, on the one hand it has been stated that the cost of the new line will be borne by the export market and transit users and not by domestic customers in Georgia. What is not clear is how in practice this cost allocation would work. For example, would the first hydro power project that comes on line be forced to bear 100% of the cost of the line so as to pay the full carrying cost that the Government of Georgia will incur as it repays its loans to EBRD and KFW? Would the cost per kilowatt hour of transmission on the new line then decline as each new power project comes on line and accesses the line? If so, we submit that such a structure would create a formidable barrier to anyone wanting to be the first developer to energize a new hydro site and access the line. If, alternatively, the tariff will be based on the assumption of a specific capacity factor on the line (say 50%), the price of transmission for each kilowatt hour would be presumably lower than a pricing model where the first user bears all the carrying cost of the line. On the other hand, if only 50% of the line is paid for through the tariff (on the assumption that there will be a 50% capacity factor), somehow the Government of Georgia will have to pay for 100% of the

carrying cost of the line. Where will the other 50% come from? Out of the general budget? Through a special assessment on new investors? Understandably, investors will want to know with as much certainty as possible the cost of accessing and using the new line and what that cost is likely to be over a reasonably long period of time.

3. Allocation and Congestion/Transit Usage

As noted, it is our understanding that the market rules will likely be modified to clarify that preference on allocation to the new line will be given to new hydro power projects in Georgia. Investors will ask what happens if more projects enter service than the new line can carry. If allocation then is to be handled through an explicit auction, then the market rules should so state. Investors also will want to know what happens if there are outages on the new line, either scheduled or unscheduled. Will a particular project have priority to get its power to the market in a situation with reduced line capacity? Or is there a pro rate allocation across all users? All of these are questions that investors will ask and that presumably can be answered through a revised, succinct set of market rules.

Finally, there has been discussion that in its early years, the line can generate additional revenue through usage as a transit facility for electricity passing from Russia and Azerbaijan to markets elsewhere that are accessed through Georgia, such as markets in Turkey. If this is the case, then these assumptions should be explicitly stated in materials regarding the line. Moreover, investors will want to know more details about the transit market. If there are any links with information regarding current and

projected transit use by Russia, and Azerbaijan, then they should be provided. Realistic estimates of revenues likely to be generated through such transit use should be furnished. Again, if a governing precept is that the line will not be paid for by domestic users and only by transit and export customers, then investors in new hydro will want assurances that reasonable transit revenues can be generated from users in Russia, Azerbaijan and possibly other countries in order to support and maintain the line until such time as their new hydro power projects enter services.

The annual cost of capital, maintenance and operation, even on a new line, will be considerable, and investors need reasonable assurances that the line will be properly operated and maintained while the new hydro power projects are constructed. Providing additional links for information to transit markets, governing market rules and policies in the transit market will be important. For example, will transit customers receive lower priority on the line than new domestic hydros? Will transit customers be agreeable to having their prioritization lowered once new hydro power comes on? Is there any assurance that the transit customers will not capture the expected market in Turkey such that the new hydros will have a diminished market in Turkey? The Government of Georgia cannot be and should not be held responsible for actions in other countries. Nonetheless, since the predicate of the investment is keyed on third country participation in some form or another, the Government should, in its investment materials, give guidance and linkages to investors. In this respect, and with regard to the Turkish market, discussed below, an informative and valuable resource is

the recent report, “Electricity Export Opportunity from Georgia and Azerbaijan to Turkey,” prepared by Econ Pöyry, AS, for the Ministry of Energy. If possible, access to this report should be made available to potential investors.

IV. THE MARKET IN TURKEY

A central assumption for the hydro power investment program is that a ready, sustained and profitable market for Georgia’s new hydro power exists in Turkey. Some of the materials prepared by the Government set forth information regarding the Turkish market, its growth (the second fastest growing power market in the world after China), anticipated pricing, and market structure. This is an excellent start. However, investors and their lenders will ultimately focus extensively on the ultimate customer. To state the obvious: it is only through the ultimate customer that the investor recovers all of its costs, pays its debt and earns its reasonable profit. If there is not a creditworthy buyer with a significant enough appetite for the power, over a sufficiently long period of time, that can easily be accessed through the existing or newly constructed transmission network, then there will be no investment in the hydro power in Georgia.

In this regard, we urge the Government of Georgia to address the following points in its promotion materials. The Government needs to lay out a systemic evaluation of the Turkish power market and provide access to third party reports (such as the Econ Pöyry report, noted above), website links, and other sources of information so that investors can become comfortable with the Turkish market. As with the transit market, Georgia cannot and should not be held responsible for actions and policies in

neighboring countries, but, since the hydro power investment program in Georgia is premised on the Turkish market, Georgia, in order to demonstrate its credibility, thoroughness and appeal, should provide these linkages to up to date Turkish information. The relevant information that investors will seek regarding the Turkish market falls into four categories:

A. Demand

Current and anticipated future Turkish power sector demand, especially in northeastern Turkey where the power will flow from Georgia, is critical. Ideally, the Georgia Deal Book should cite Turkish load forecasts that have been prepared over the last few months, reflecting the global economic crisis and potential recovery, and forecasts that also reflect currently projected demand and supply imbalances in Turkey, taking into account existing and proposed future Turkish generation. It is likely that third parties, such as the Energy Regulators Regional Association (www.erranet.org) will have such information, as well as Turkish resources. In particular, it is our understanding that Turkey plans to build a nuclear power plant that would become operational around 2025. Investors will ask if this is a realistic target, and if so, how such a plant affects the supply-demand balance and pricing in the marketplace. New hydro coming into commercial service in 2015 or later will likely require contract terms that run beyond 2025. One question is whether sufficient demand for Georgia hydro will still exist after the commercial operation of a Turkish nuclear power plant.

B. Price

Investors will need to become comfortable with current and projected forward prices in the target market in Turkey. Investors will ask about the factors on what current pricing assumptions are based and the sensitivity of these assumptions to anticipated changes in the price of natural gas, oil, coal, or other thermal forms of energy. Likewise, investors will inquire how prices are set within Turkey and by whom and whether Turkish customers likely to enter into long term contracts of sufficient duration to meet lender expectations and that provide reasonably adequate margins to investors. Again, while Georgia cannot answer all these questions with respect to Turkish buyers, it ideally should be able to provide examples of other long term, cost effective and profitable deals entered into by private sector investors in Turkey. Pricing information and contract terms under the Turkish market are very important to investors.

C. Market Structure, Buyers and Creditworthiness

The Georgia investment materials also should provide links to websites or publications that accurately describe the current and anticipated structure of the Turkish market, who can buy and sell power, the role of the Turkish regulator, applicable Turkish market rules and grid codes and related information. If there is any information regarding the creditworthiness of potential buyers, that should be provided as well. During our meetings, several parties talked about large Turkish end-use buyers, such as major manufacturing facilities, that would potentially be interested in

securing a long term, stable, and reasonably priced supply of power, and perhaps even willing to participate as investors. These customers will wish to avoid load shedding that occurs in the high demand summer months in Turkey. If publicly available, information regarding these potential buyers should be made available in promotional materials so that their creditworthiness can be given a preliminary assessment by investors. The ability of investors to understand the overall Turkish market and potential Turkish buyers will be important. For example, Turkey's participation under the Energy Community Treaty as an Observer, and its policies vis a vis EU Energy Directives are information points that can easily be obtained and included in the promotional materials.

D. Transmission Access and Transmission Capacity Within Turkey

As within Georgia, investors will need to know that, depending on the point of delivery for the sale of their capacity and energy, they (or their customers) can have access to the transmission network in Turkey, that there is sufficient capacity in the network to accommodate the new hydro power flowing from Georgia, and what the pricing on the network, currently and going forward. One can imagine several different potential power purchase agreement scenarios that allocate this risk. For instance, it could be that the project developers in Georgia agree on an "all-in" price for delivery to the Turkish customers, such that the costs of transmission in Turkey are rolled into the price. In this case, the investor will need to know all of the relevant information regarding access, tariffs, and pricing within Turkey. Another potential scenario is that

the investor delivers the power to the Georgian/Turkish border and it becomes the buyer's cost and responsibility to take the power at that point and deliver it as it wishes. In this case, the buyer will need to know this information within Turkey. However, since the investor will be selling the project output to Turkish customers, it will need to be able to direct its Turkish customers to information and sources regarding these facts. Moreover, lenders to the project in Georgia will need to have confidence that all risks associated with construction and generation, transmission within Georgia, transmission within Turkey, ultimate delivery within Turkey and payment capability in Turkey, have been identified, allocated, and mitigated.

Thus, since Turkey is the target market, a credible Georgia presentation will include carefully reasoned, clear information and links to Turkish data sites regarding demand, price, market structure, buyers and transmission access.

V. ADDITIONAL CONSIDERATIONS

In addition to these three broad categories (site development in Georgia; the new transmission capacity; and the Turkish market), there are additional considerations that we wish to bring to the attention of the Government of Georgia. Properly addressed, these factors can enhance the attractiveness of the investment opportunity.

A. Deal Book, Websites and a Ministry Champion

As noted, Georgia has an enviable position heading into a resurgent global energy investment environment. It is blessed with numerous, high quality sites with significant hydro power potential; it has neighbors, especially Turkey, that apparently

have sustained demand for additional power many years into the future; a clean, renewable, carbon free generating resource like hydroelectric power will continue to have added value into the future as regional and global compacts to address greenhouse gas emissions and global warming take increasing effect. Georgia, however, will be but one of multiple countries globally seeking private capital to develop additional generation. Georgia also has a geopolitical risk profile that it needs to address.

We recommend that Georgia build on its already impressive efforts to prepare informative PowerPoints and websites and turn these into first class presentations, akin to the same quality of Deal Books prepared by globally recognized, high quality investment bank advisory teams. All of the raw material is there. Georgia should elevate the awareness of its investment opportunities by both addressing the substantive questions discussed above and by adopting a transparent, proactive electronic media approach. This would mean constantly refreshing and updating websites. We note, by way of example, that www.georgiahydroinvest.com appears to have been last updated in April 2008, over a year ago. We recommend that the websites contain an interactive format whereby investors can ask questions and receive answers. The websites should be actively and periodically updated to include new developments, such as a constant stream of information about the proposed new 500 kV/400 kV transmission project, information regarding any changes in tax, environmental, land use, labor or other laws that would be of interest to investors in the

hydro power sector and updates regarding the selection criteria and awarding of hydro power projects.

Georgia should consider appointing and publicly identifying a senior, dedicated resource within the Ministry of Energy, or other appropriate Ministry, to whom investors can have direct access with questions and comments, and from whom prompt responses can be expected. This person will be the Government champion for the investment program. In our view, Deputy Minister Valishvili de facto already fills this role. Formally identifying the office as the hydro power investment “point person” and champion would formalize the unprecedented high level, transparent access investors already enjoy in Georgia

B. Investment Climate

Georgia has made considerable strides in other metrics influencing investment. For example, Georgia has recently been rated by an independent third party organization as one of the top places in the world to establish a new business. This is an achievement of which Georgia should be proud and that should be included in promotional materials. Georgia should provide a link to the report. Similarly, it is our understanding the Georgia has consistently improved its rating by Transparency International. Again, this is a tool and an information source that investors utilize. Georgia can speak to (and claim credit for) its continued improvement and identify what additional steps it is taking to continue to address concerns about transparency and rule of law.

C. Political Risk Insurance

Political risk insurance should be available for investments in hydro power projects in Georgia. Although most international investors will be aware of programs through MIGA, OPIC, and others, Georgia can and should provide links to make it easy for investors to confirm for themselves the likely availability of political risk insurance. In addition, international financial institutions, such as IFC, EBRD or European Investment Bank, may also be willing to invest equity in these projects. While Georgia cannot speak for the agencies, it can provide helpful links to websites, local offices, and individual officials who can provide beneficial information about the programs of these international financial institutions.

D. GNEWRC

The role of the Regulator, GNEWRC needs to be made clear. The World Bank sponsored a study to survey criteria that international investors rate as most important in deciding where to invest in the energy sector. According to the World Bank, “The overriding criterion: a legal and regulatory framework that is fair, consistent, predictable, where contracts and agreements are reasonably enforced.” (World Bank, Energy Mining Sector Board Discussion Paper 6, May, 2003). Georgia must take steps to assure that GNEWRC in reality exercises the authority and autonomy granted to it under relevant legislation. While the legislation distinguishes between the role of the Ministry as policymaker and GNEWRC as implementer, tariff setter and licensor, during our meetings it was not entirely certain with whom primary responsibility for

certain activities, such as establishment of tariffs on the new line, would lie. Investors will seek clarity in this regard.

E. Dispute Resolution

While disputes should be avoided, it is likely that there will be investor disputes associated with such a massive program of investment. Georgia should identify in its promotional materials whether it has adopted or supports international arbitration conventions. If Georgia has enforced international arbitration awards, it should cite these as examples of its commercially-oriented investment climate.

F. Seasonal Markets

We have been advised that, at least in the early years of development, it is anticipated that output from the new hydro power plants would be dedicated to Georgian internal consumption in winter months in order to displace thermal generation and imports and would be available for export markets in the summer. The theory is that since Turkey has sufficient supply in the winter, and significant excess demand in the summer, this type of split market would be both workable and appealing to investors. We are not sure. Investors may prefer to have one, creditworthy counterparty to purchase the output of a plant in a market like Georgia (with backup potential customers in the event of problems with the primary buyer). The split season approach would create two different buyers, two different counterparties, and thus two different counterparty risks. Furthermore, we have seen no evidence that potential Turkish buyers would be willing to divide the market

seasonally in this fashion. That may be the case, but as with other specifics regarding the Turkish market, this assumption is one that Georgia needs to document and develop more in order to make it easier for investors to accept the notion of making significant capital investments in one country for the primary, if not sole, purpose of exporting to a second country.

G. Contract Enforcement

At the Symposium held at ISET, we were advised by some existing investors that ESCO had “changed the rules of the game” and altered tariffs in contravention of existing contracts, to the detriment of the existing investors. We do not know if this assertion is accurate or not. We have not seen any of the underlying contracts, and do not know their duration, their terms, and conditions, or the legal and regulatory authority of ESCO to alter or amend them. That is not the purpose of this Report. What is relevant for these purposes is for Georgia to recognize that some current investors within the country believe that “the rules of the game” were changed on them midcourse, to their detriment, and without legal authority. Other potential investors likely will contact existing investors to obtain their view of investing in Georgia, and a negative report along the lines noted above could be a significant impediment toward investment within Georgia. Georgia thus will need to develop a clear response that is cogent, investor friendly and understandable with respect to these comments.

H. Labor Force

An additional factor Georgia can and should market is its human resource talent in the power generation sector, especially in the hydro sector. Georgia's universities and technical institutes have historically produced impressive numbers of highly educated and well-trained engineering graduates with a particular emphasis on hydro power generation and transmission. This capacity continues today, and representatives of different Georgian universities report that they annually graduate many well-trained, knowledgeable power engineers. Investors are always concerned about human talent and the availability of experienced, reliable and plentiful labor supplies. Not every venue in the world can offer the same assurances in this regard as Georgia. Georgia's transaction materials, including the websites, the Deal Book and PowerPoints, should emphasize this point and provide linkages to the applicable universities and technical institutes.

I. Russia-Georgia Conflict

The impact of the Russia-Georgia conflict in August 2008 cannot be downplayed. Russian troops and armor today are approximately 50 kilometers from the capital, Tbilisi. Investors know this fact. Georgia will need to compensate and adjust for that risk. Georgia can do so in many different ways, including taking some of the steps outlined above, such as addressing political risk insurance. The ultimate goal for Georgia is to package professionally the significant and genuine investment opportunities in the easiest, clearest, most direct fashion, with as few unmitigated risks

and unanswered questions as possible, for investors to evaluate and act upon. Clarity with respect to site selection and award, cost control with respect to transmission access and wheeling, an “open door” and transparent policy with the Government, recognition of rule of law and enforcement of contracts through internationally accepted arbitration procedures, a reliable supply of information on projected markets such as Turkey and transit markets, will all help make the Georgian investment possibilities in hydro globally attractive and help overcome regional and geopolitical barriers.

J. Turkish Investors

Finally, Georgia should considering going the extra step and identifying potential investors in Turkey. It then needs to contact the investors directly, discuss this investment opportunity with them, assemble a team and do a “road show” (again harkening back to the world class investment banking approach) and present in person, presumably in Turkey, to these investors about the opportunities in Georgia. Investors should be impressed with the relative ease of doing business in Georgia, straightforward and non-burdensome licensing requirements, the construction of the new transmission line, and related developments. Turkey can function both as a market (as customer) and capital source (as investor). Georgia should prioritize its work to focus on the Turkish market in both of these respects.

VI. CONCLUSIONS

As this Report emphasizes, Georgia has prepared an ambitious, but achievable, investment program to develop new hydro power generation for export markets. Many of the prerequisites for successful execution on the plan are in place: an abundant, renewable, carbon free resource; an appropriate legal and regulatory structure; plans to create necessary transmission infrastructure; and a nearby market with strong demand. Other questions and uncertainties remain. This Report attempts to identify the principal issues that experienced global investors in the power sector are likely to raise and to suggest approaches by which Georgia can successfully address these issues and become a desired investment location.

APPENDIX A

Meetings included sessions with experts from:

- Advanced Engineering Associates International
- American Chamber of Commerce in Georgia
- Asian Development Bank
- Caucasian Energy and Infrastructure
- Eastern Power Corporation Ltd.
- ECI Project
- Ento
- European Bank for Reconstruction and Development
- Georgia Technical University
- Georgian Chinese Investment Corporation
- Georgian Urban Energy Program
- Gross Energy
- Hydroelectric Engineering Company
- International Finance Corporation
- JSC “Caucasus Energy & Infrastructure”
- KFW Bankengruppe
- Ministry of Energy of the Republic of Georgia
- Skaki Tsereteli State University
- Stuck Limited
- The Energy Academy
- The Energy Efficiency Center
- The Rural Energy Project
- Transparency International
- United States Agency for International Development
- WEG (World Experience for Georgia)
- Winrock Georgia – ACCESS Group Ltd.
- World Bank