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**Hydropower Investment
Promotion Project (HIPP)**

REPORT ON THE CHALLENGES IN SECURING NON-RECOURSE FINANCING FOR HYDROPOWER DEVELOPMENT IN GEORGIA

DRAFT, OCTOBER 10, 2011

October 10, 2011

This publication was produced for review by the United States Agency for International Development. It was prepared by Deloitte Consulting in collaboration with Black & Veatch and Pierce Atwood LLC.

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(HIPP)

CONTRACT NUMBER: EEM-I-00-07-00005-0

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IN COLLABORATION WITH BLACK & VEATCH AND PIERCE
ATWOOD LLC.

USAID/CAUCASUS OFFICE OF ENERGY AND ENVIRONMENT
THURSDAY, JANUARY 10, 2013

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INTRODUCTION

HIPP was requested by USAID Georgia to analyze the availability of commercially sourced non-recourse, project finance¹ for the development of run-of river hydropower in Georgia in the absence of Government of Georgia credit support for ESCO, the energy off-taker. Accordingly we have conducted a survey of the International Financial Institutions (“IFIs”)² operating in Georgia, which institutions take the lead in providing money in high risk, developing countries. As such IFIs are effectively the commercial finance “gatekeepers” for many emerging economies; commercial banks will almost invariably follow their lead and are unlikely to independently offer non-recourse financing if this is not already supported by the IFIs.

While the use of non-recourse instruments and IFIs are important options in the financial structuring of small and medium-sized hydropower projects in Georgia, there are a variety of other financial institutions and entities that could potentially be involved in providing other types of finance for such projects, either in the form of equity or in the form of loans, such as:

- Developer funds for early stage project development
- Equity investments
- Recourse loans
- Carbon emission reduction credits

To complement this report, these sources, and the potential and impact of them, should be considered in a follow-on report.

Non-recourse financing is usually the least expensive form of commercial financing available, and it fits best the traditional business model of developers. The fact that, as shown below, non-recourse financing is not currently a viable financing mechanism for the Georgian hydropower sector is unfortunate, but this also provides additional impetus to the need to

¹ A loan where the lending bank is only entitled to repayment from the revenue of the project the loan is funding, not from other assets of the borrower. Thus, debt provided by banks to distinct, single purpose companies, whose revenues are guaranteed by creditworthy off-take agreements. For renewable energy projects these are typically structured as Power Purchase Agreements (PPAs). Given that 95% of the cost of a hydropower plant is its capital cost, this type of loan/leverage is essential for the developer to realize its required rate of return on the capital it has exposed to a project (which is separate from the amount of the loan, unless the loan is guaranteed by the borrower’s balance sheet, in which case it is not non-recourse). In the case of US developers, their required rate of return would exceed 20% on the amount of their capital employed, particularly in the case of Georgia, which is viewed as high risk.

² IFIs are highly rated financial institutions controlled by sovereign shareholders. As such, IFIs retain supranational status, whereby they benefit from special statutes conferring some elements of sovereign power on them, placing them above the jurisdiction of any one sovereign state. Their main mission is to enable countries that are less developed or experiencing economic difficulties access to financing that otherwise would be unavailable from commercial sources based of their own inadequate international credit standing.

investigate which other financial mechanisms can be used successfully within the Georgian context and how these will work USAID's concurrence to work with counterparts and complete such an analysis in the short term would therefore be appreciated.

The Importance of Non-Recourse Financing

Why is an enabling environment for non-recourse project finance important? It is important because for a developer it is the mechanism by which it maximizes its return by shifting project risk (usually up to 70% of a project's costs) to a non-related funding entity at a cost to it substantially lower than the developer's required internal rate of return. This allows the developer to undertake a project that otherwise would be too risky for it, were it to have to finance the project using its own balance sheet, either as equity or as surety for a loan.

Non-Recourse Financing is also vitally important for local economies, and its availability has widely been seen as a catalyst for foreign direct investment ("FDI")³. This is relevant since Georgia is still highly dependent on foreign financial aid, donations and concessionary loans. This dependency has arguably led to both current account and fiscal deficits and a periodically overvalued currency⁴, all of which paradoxically ultimately worsen political and financial risks for long-term private sector investors. FDI has an important role in reducing these deficits (and associated risks). However due to external and internal developments, the FDI inflows are now stagnating in Georgia⁵. Financing of infrastructure by enabling non-recourse project financing could significantly relieve public sector reliance on handouts and reduce public sector debt by spurring development.⁶

With the gate keeping role of the IFIs in mind we interviewed the International Finance Corporation ("IFC"), the European Bank for Reconstruction and

³ See "Foreign Direct Investment for Infrastructure Development: Changing Nature of Risks and Challenges for Developing Countries", In particular Chapter 3 - Project Financing: The New Face of FDI, Asanga Gunawansa, 2005

⁴ See "IMF Country Report No. 11/93", April 2011

⁵ *IBID*; Total foreign direct investment for the first two quarters of 2011 is in nominal terms only 0.6 percent more compared to the same period in 2010. The IMF stated "While net external borrowing by the banking and corporate sectors recovered quickly from its crisis trough, and was supplemented by increased official lending flows, FDI has continued to stagnate—indeed, it is estimated to have declined by an additional 1 percentage point of GDP in 2010 compared to 2009." Also see comment by IFC re diminishing loan demand – footnote 15 herein.

⁶ As we have pointed out elsewhere, this means that the only investors that are potentially interested in the HPP sector in Georgia are those that would risk their own capital in such an unpredictable environment without any support from lenders, multilateral or commercial. Such a high risk environment would preclude most if not all US developers.

Development (“EBRD”), the Asian Development Bank (“ADB”); and Deutsche Entwicklungs Gesellschaft (“DEG”). These are the major IFIs operating in Georgia that lend directly to private investors.

For good measure, HIPP also interviewed an international commercial bank, Société Generale, and several local Georgian commercial banks, TBC, the Bank of Georgia and VTB. Finally, we examined the financial statements of ESCO⁷ for 2010 and 2011 to evaluate the financial strength and weaknesses of the institution.

It should be noted that we are not making any recommendations in this Report. Our recommendations have been made elsewhere, both in memoranda to USAID and discussions held subject thereto.

⁷ ESCO is meant to be the buyer for at least three months a year, and the supposition of the Georgian stakeholders is that developers will a) be satisfied with ESCO’s creditworthiness, and b) be able to negotiate offtake agreements in Turkey with creditworthy buyers there. Non Turkish developers and their lenders, however, prefer to have one domestic buyer committed to purchasing the entire output at a fixed price for a fixed long-term period.

EXECUTIVE SUMMARY

Based on the survey, HIPP has concluded that commercially available non-recourse project financing for hydropower projects is not available. Until the reasons impeding the availability of such financing (as identified below) are addressed, developers will have to rely on their own balance sheets to fund investments (expensive), venture capital type funds (very expensive), or upon foreign assistance funding programs such as OPIC, which are politically rather than commercially driven.

The reasons given by those surveyed for the lack of commercially available non-recourse project financing for hydropower projects in Georgia are:

- 1) Unacceptably high political risk⁸;
- 2) A high regulatory risk made worse by the relatively long pay-back time required by HPP projects;
- 3) A lack of government credit support for ESCO, the current creditworthiness of which is unsatisfactory to lenders, and which lack of support leads lenders to question whether the government believes in or values development in this sector⁹; and
- 4) The lack of electricity market transparency, particularly as evidenced by confusion over allocations on export lines and lack of clarity on export tariffs.¹⁰

Also of note, partial risk guarantees¹¹ that are otherwise available from the World Bank to support projects apply only to those obligations undertaken by

⁸ As stated by EBRD and IFC. Components of political risk for lenders - besides those commonly understood (war, government stability, foreign interference, etc) - also include the country's investment profile: i.e. contract viability; profits repatriation and payment delays.

⁹ See interview with Société Generale. "The only thing we can do is to lend with a government guarantee and if the projects (based on Turkish PPAs) are so good (which I believe they are) they shouldn't shy away from backing them with a real guarantee"

¹⁰ These risks are exacerbated by the currency mismatch between the funding currency and the currency of the revenue generated, given the high proportion of foreign long-term capital required in the overall investment.

¹¹ The World Bank offers three forms of guarantees — partial risk, partial credit, and policy-based. The guarantees are designed to protect creditors from certain sovereign-related risks, such as the inability to convert and transfer foreign currency. Financial participation by the host country government is required in conjunction with a private or public project via a counter-guarantee. Defaulting on World Bank debt would likely result in a halt on all disbursements of bank loans, as well as a stop on the approval of new projects. The partial risk guarantee is available to cover the risk of default due to nonperformance of contractual obligations undertaken by governments or certain political force majeure events. Any given government obligations will differ depending on the nature of the project and industry involved. Examples of common obligations include the maintenance of an agreed upon regulatory framework, the delivery of inputs, and the payment for outputs (credit support). In addition, the risks of currency transfer and convertibility can also be covered by a partial risk guarantee.

governments. In the case of Georgia, the Ministry of Energy has stated that the Government will not provide credit support for HPP projects; as such partial risk guarantees are not available.

More generally, most IFIs believe that most HPP projects initiated by the Ministry of Energy have not yet been implemented due to lack of appreciation by government of the risks which accompany this mode of financing. There are two flaws in government's approach cited by both EBRD and IFC: inadequate contractual support from government and an inadequate legal and regulatory environment. For example, the current Power Purchase Agreement (PPA) offered by the MEMR is perceived to leave too large an amount of risk to the project company, and the current Georgian institutional and regulatory framework is considered to be both opaque and confusing.

In combination with other macroeconomic factors, such as Georgia's exchange rate, relatively high inflation and foreign trade imbalance¹² the inevitable conclusion is that no IFI and, by extension, no commercial bank, will undertake non-recourse project financing of HPP development in Georgia at this point in time. However, the results of this survey also clearly show that IFIs *would* be interested in funding Georgian HPP projects, provided that appropriate market, credit and institutional arrangements are made (as they have been in many developing nations) to address the challenges outlined above.

THE INTERVIEWS

Of particular note when we carried out our meetings were the positions of EBRD and IFC¹³, which are specifically mandated to foster development and also enjoy a "preferred credit status"¹⁴, a protection unavailable to commercial banks. Both EBRD and IFC were emphatic that they would not lend on a non-recourse basis in Georgia, and both stated that they did not believe that there were any developments that would change their respective

¹² There has been increasing deficit in the current account balance of Georgia. Such a large deficit is an indicator of a lack of international competitiveness and of the need for new investments, especially foreign direct investments, as well as the need for solving structural problems. These factors create an unfavorable business environment for investors, and this in turn has an impact upon the risks accompanying project financing of infrastructure projects in Georgia.

¹³ And by extension the European Investment Bank ("EIB"), which participates in Georgia with them. EIB does not have an office in Tbilisi; EIB will, according to EBRD, only enter deals taking the lead from EBRD and IFC. So EIB will also by extension not provide non-recourse financing in Georgia at this time.

¹⁴ As multilateral development institutions, EBRD, IFC, AdB and EIB enjoy a de facto preferred creditor status. The preferred creditor status means that, during a period of political and economic turmoil, when restrictions and controls on foreign currency payments are imposed, a member government would not likely prevent payment to a multilateral bank. Unlike commercial banks, IFIs do not reschedule sovereign debts. Rather, the host government would most likely place priority on IFI loans to maintain access to financial support. This is a de facto status for sovereign borrowers because, in most cases, the sovereign has indemnified the multilateral.

positions in the foreseeable future. When an institution with preferred creditor status takes such as position as have EBRD, IFC and EIB in the case of Georgia, no prudent commercial bank will deviate from it. When asked the question as to whether they were aware of any commercial banks that would take such a risk, both institutions stated emphatically that they do not. Moreover, IFC asked in turn, "Why would you ask such a question? We both know the answer."

The International Finance Corporation

Questions posed and answers given by IFC were as follows:

- Would the IFC underwrite Georgian project risk today? – "No"
- Do you see any developments happening that would lead IFC to underwrite project risk in the foreseeable future? – "No"
- Are you aware of any commercial banks that would take Georgian project risk under the current circumstances? – "No"
- Under what circumstances would IFC underwrite project risk in Georgia? – The answer encompassed the removal of those impediments we have previously identified for USAID and which IFC have previously reviewed and endorsed. IFC Georgia suggested we meet with IFC in Turkey to discuss the matter further from their perspective.
- Why doesn't the Government want to provide credit support? – "Maybe in the past this was done badly (Tramex)." "They are creating this fund; but it is inadequate". "It is a half measure". IFC agreed that it could raise more questions than it answered. "There is no liquidity."
- When informed that HIPP is meant to survey banks to determine whether they would be prepared to underwrite project risk in Georgia, IFC responded. – "Why would you want to do that?" "We all know the answer". IFC repeated the offer made to us the last time we met to get a small roundtable together of IFC and EBRD to meet with the US embassy and brief them on the problems in financing projects in Georgia.¹⁵

The European Bank for Reconstruction & Development

The points EBRD made were as follows:

¹⁵ In a subsequent meeting with IFC on September 15, 2011, IFC stated that Georgian political risk was a major concern for IFC and the prospects for future FDI were poor as IFC was witnessing a significant drop in loan demand. IFC maintains that most FDI in the past two years has been driven by loans that they and AdB have provided. The availability of partial risk guarantees ("PRIs") was also discussed, but IFC did not see the willingness of the Government to engage with the World Bank to secure PRIs.

- EBRD stated that “no commercial banks are prepared to take Georgian country risk”; this is primarily due to Georgian political risk and the risks of an undeveloped legal and regulatory environment. Commercial banks would only be willing to do so under EBRD’s umbrella as a preferred creditor, but EBRD is itself not willing to extend any loans on a project basis in Georgia.
- The Paravani loan was not a project loan, contrary to press reports. The loan is a 15 year term loan with a corporate guarantee for the entire term, which guarantee could come off only if certain financial and technical tests are met at some future, indeterminate time. Additionally, an attractive feature for EBRD was the fact that Paravani can be connected directly to the Turkish grid if necessary.
- As a lender to the transmission line, EBRD is concerned about its reputational risk because the MENR is making preferential deals for line allocation that suggest to people outside of Georgia (he didn’t say who these people were) that “side deals” are being made. While we agreed that these deals (such as the allocation of transmission capacity to Khudoni) were probably due to an excess of enthusiasm, the external perception of favoritism is a problem for the Bank.
- EBRD has “no idea” whether Turkey has made the budgetary commitment to reinforce its grid to evacuate power. EBRD is at pains to point out that their Black Sea Transmission loan was a sovereign credit risk.
- “No one in Turkey is serious about the project”. The power from Georgia “is a drop in the bucket”. On the other hand, what apparently is a priority for Turkey is the \$100 million that Georgia owes for past power exchanges, so states EBRD.
- EBRD is not now stopping disbursements for the Transmission line in spite of little or no progress on the reform milestones set forth in the inception report as established in 2009. “The clock has not yet run down”, though it will do so soon. Nonetheless, disbursements will most probably continue regardless because contractors have been hired and again, the loan is sovereign.
- EBRD expressed its dissatisfaction with the progress of reform and the positions taken by MEMR, but its approach is to let MENR and the other stakeholders come to the realization that certain reforms are necessary “on their own”.
- EBRD does not see the possibility of an industrial project within Georgia justifying a loan to a developer for an HPP project because “the availability of power does not justify it.” Power is cheap and plentiful for the majority of the year and will stay that way “unless there are price rises of 10% annually for at least three years”.
- OPIC “went wild” when it lent money to Mtkvari. “There is no way EBRD would ever do such a deal”.

The Asian Development Bank

The points AdB made were as follows:

- AdB has extended 1.5 billion dollars to Georgia on a sovereign risk basis.
- The Georgian Government is not in a position to issue any more sovereign risk type guarantees, direct or contingent, hence any lending to HPP developers would have to be without government credit support.¹⁶
- AdB would very much like to lend to HPP projects in Georgia.
- The most important things for AdB when considering a loan for an HPP are:
 - The quality of the sponsor (strength of credit and technical ability) – “No institutional investors!”
 - The quality of the offtake agreement (PPA) – “The offtake agreement is key. How is it guaranteed?”
- AdB “would most probably look for the same type of guarantees that IFC and EBRD would want”; i.e. recourse to corporate sponsor balance sheet support.
- AdB spoke about GEDF and agreed that this was a lost opportunity; AdB did not understand why the government did not want do the things necessary to make the fund attractive to institutional investors who would be prepared to take venture capital type risks.
- AdB believes that the Government’s approach to the development is “too *laissez faire*”. AdB thinks this will change over time, but AdB attributes the lack of things like market rules to this passivity.
- AdB discussed the infrastructure fund that has been set up by government (Georgian Rail, GOGC and GSE shares). AdB stated that it “fails to provide liquidity”.

The Deutsche Entwicklungs Gesellschaft

DEG made the following points:

- DEG will not provide any non-recourse financing to Georgia whatsoever; they would require a guarantee from a creditworthy off-taker; ESCO is not creditworthy; DEG’s standards for credit are the same as IFC and EBRD.
- Hydropower development is a high priority for DEG, so they regret that this is the situation in Georgia.
- They view the current situation in Georgia regarding the development of conditions that would allow them to support hydropower developers as “not brilliant”.
- They do not see this situation changing for the better at any time in the foreseeable future

¹⁶ This statement by AdB was contradicted in a subsequent meeting held with the IMF, during which we specifically asked whether the IMF had either set limits on or otherwise advised the Georgian Government not to issue any contingent credit support type guarantees. The head of the IMF delegation stated that this was not the case, and in fact they saw this form of credit support as an important tool in promoting FDI.

It should be noted that DEG is a major shareholder in TBC; the same credit policies that drive DEG will apply to TBC.

Société Generale

Société Generale is the third largest bank in terms of infrastructure finance in the world in the first half of 2011 according to Infrastructure Journal, having arranged over 3.3 billion dollars in infrastructure investments during that six month period. We posed the question to the Director of Cross Border Asset Solutions of Société Generale in London, Razvan Frumosu, who responded:

- “The only thing we can do is to lend with a government guarantee and if the projects (based on Turkish PPAs) are so good (which I believe they are) they shouldn’t shy away from backing them with a real guarantee. The government can put equity in a fund and then they could leverage it up with a loan. If they can borrow money at x% and seed power plants with ROEs at 20% then it’s a no brainer. They need to quantify what is the ROE on a power station based on PPAs with prices that [we] don’t know and then make a quick decision. We’re not sending people to the moon.”

VTB, Bank of Georgia, TBC

To be inclusive, we also looked at the local banks. It should be noted that, given their respective size relative to the costs of financing hydropower projects (at least \$1MM per megawatt of installed capacity), they could only lend to small projects. The local banks, while evidencing a desire to finance projects were not prepared to provide funding without substantial guarantees. Guarantees mentioned as requirements were:

- Alternative debt service sources (some long term stable business);
- Alternative pledges;
- Corporate Guarantee (from sound company);
- Co-borrower
- Mortgages

During the interviews it became clear that the concept of non-recourse project financing is new and untried, and so misunderstood. The banks stated that they needed to back up loans with viable PPAs from local customers (they also stated that Turkish Market is “a bit remote perspective”, and that the one year license constraint for Turkish customers is an impediment for them as well”). The banks said that the major risk for them was the sales risk (i.e. the off-taker”).

ESCO FINANCIAL STANDING

Non-recourse financing relies on the creditworthiness of the off-taker. An examination of the quality of ESCO’s accounts as the buyer of power reveals

that it is under capitalized with a reputed net worth of only some 5 MM GEL (USD 2.9 million), which is grossly inadequate to backstop the risks that would have to be undertaken for the development of even a single medium sized HPP.¹⁷ Moreover, we are now given to understand that some 4 MM GEL will have to be written off ESCO's accounts due to the bad debt of Kakheti Distribution Company. As if this weren't enough, the Paravani implementation agreement, that we have only recently seen, requires ESCO to contract for a minimum energy offtake equating to an ESCO obligation to buy USD 18.6 MM annually +/- 10%. Moreover, there is a requirement that ESCO open and maintain an irrevocable revolving letter of credit in the amount of 2 months equivalent output – so ESCO would have to put up more than \$3 MM security with a bank to cover this contingency (a challenge now that its net worth has been gutted by Khekheta failure to pay 4 MM GEL). The L/C would be callable against a simple presentation by the developer.

Thus ESCO is not a creditworthy off-taker.

CONCLUSION

Based on the survey results, non-recourse project finance requires clear and uncomplicated procedures for contracting projects as a precondition for its implementation. Without clear and uncomplicated rules, the very concept of non-recourse financing becomes moot. The IFIs stated that these rules are manifest in proper legislation and the establishment of supporting institutions and are critical for cooperation between public and private sectors.

In addition to a comprehensively developed regulatory and institutional framework, the IFIs stated that project financing is impossible if the public sector does not pre-define clear priorities in the sector of infrastructure. These priorities must be evidenced by a willingness of the public sector to provide contingent credit support where necessary and to participate in a proper allocation of risk between itself and the private sector. Government thus must bear not just those risks associated with war and insurrection, but must cover nonmarket factors caused by acts of government including fiscal, monetary, trade, investment, industrial, income, labor, legal and environmental actions within its control that might otherwise interfere with a project. It also must cover the failure of state-owned companies to abide by contractual terms (credit support via contingent guarantees), as it controls those companies. The pre-requisites are all lacking in Georgia.

¹⁷ The Paravani deal gives an indication of what levels of support the market would require of ESCO in so far as the agreement between ESCO and Anadolu requires a callable, revolving letter of credit at a bank acceptable to Anadolu secured by ESCO in amount equal to 2 months off-take based on a minimum annual amount of energy to be taken by ESCO of 360 million kWh at a price of 4.67 US cents per kWh. This equates to a plant of about 40 MW and an L/C in the approximate amount of USD 2.8 million, exceeding the current net worth of ESCO. Moreover, given that this is an extant deal, ESCO's current capacity to provide any further security has been exhausted.