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Hydropower Investment Promotion Project (HIPP)

GEORGIA

RECOMMENDATIONS FOR IMPROVEMENTS TO THE LEGISLATIVE FRAMEWORK FOR HYDROPOWER DEVELOPMENT

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TABLE OF CONTENTS

RECOMMENDATIONS FOR IMPROVEMENT TO THE LEGISLATIVE FRAMEWORK FOR HYDROPOWER INVESTMENT

1. INTRODUCTION

One of the principal objectives of Georgia's energy policy is to attract investments into the country's hydropower sector. In order to achieve this goal the Government of Georgia ("GoG") has introduced a State Program for Renewable Energy of 2008 (the "RE Program") for small and medium-sized plants as well as competitive tender procedures for large hydropower plants ("HPPs") of 100 MW or more.

This report is a follow-up to an earlier report prepared by the Hydropower Investment Promotion Project ("HIPP") describing the RE Program and all of the steps a potential investor is required to take to secure an HPP site ("Hydropower Investment Enabling Legislation"). The current report addresses issues identified in the enabling legislation that constitute potential obstacles to hydropower development in Georgia and makes recommendations to improve the existing legal and regulatory framework.

2. INVESTMENT PROGRAM ISSUES

2.1. 2008 RENEWABLE ENERGY PROGRAM

2.1.1. Legal Nature of RE Program

Before elaborating on specific related to the RE Program, the overall legal setting in which RE Program is operating needs to be addressed. The introduction to Resolution No. 107, dated April 18, 2008 ("Resolution"), cites the *Law of Georgia on the Structure of the Government and Rules of its Activities* ("*Law on Government Structure*") as the legal authority for approval of the RE Program. Specifically, the Resolution cites to Article 5 of this law as the basis for adopting the RE Program. That article refers to the right of the GoG to "manage" state property. Therefore, the Resolution implicitly acknowledges and recognizes that the process introduced for hydro investments qualifies as management of state property.

The RE Program also involves rules for *tendering* hydro sites. More precisely, the GoG invites expressions of interests to bid on the sites and then opens a one month window for competition. Articles 12 and 13 of the Resolution describe the criteria under which competiting applications will be evaluated and Article 19 specifically states: "By requesting from [sic] the selected party's site or by its own initiative the Government will consider to [sic] grant the selected party land area necessary for the construction of power plant in accordance with the current regulations." Thus, the Resolution also acknowledges and recognizes that, under the term "manage," the GoG implies the sale or concession of property or rights.

A closer analysis of both the *Law on Government Structure* and the RE Program, however, indicates that in reality, the rights granted to investors are quite limited. Under the applicable law, there are three types of property rights which could theoretically be granted by the State (i.e. on behalf of the State by the state entity

which is authorized to manage or dispose state property, which is currently the Ministry of Economy and Sustainable Development). They are: (a) land/immovable property owned by the State; (b) water resources; and (c) a particular project which already has an exclusive right to either 'a', 'b' or both. These three alternatives are discussed below, along with a fourth option which falls under another law:

A. LAND PARCELS

Under the *Law on State Property* enacted in July 2010, the land parcels adjacent to the rivers listed in that law are not subject to privatization. Those rivers correspond to the rivers listed in the annex to the RE Program. Thus, as a general rule, the investor or the project entity will not be able to acquire title to the land on which HPP assets need to be located. Moreover, any improvements or buildings installed on those sites remain the property of the land owner, i.e. of the State. There is an exception to this prohibition if: (a) the land is needed for an "important project;" and (b) the land parcel involved is agricultural land. In such a case, the GoG can grant the right to privatization upon the request of the Ministry of Economy. No criteria for determining what projects can be deemed "important" are provided in the law. At this stage, it is also unclear what the status is of most of the land parcels adjacent to the rivers under RE Program. Not all land along rivers in Georgia is agricultural and therefore subject to this exception. Thus, it is clear that under the RE Program and the Memorandum of Understanding ("MOU") which investors are required to execute, the GoG is not selling any rights to land.

B. WATER RESOURCES

Water resources in Georgia belong to the State and are not subject to alienation. Only the right to use water in Georgia may be granted and this right may be restricted depending on the status of the water. Granting rights to the water is not subject to licensing or permitting; however, HPPs are subject to environmental permitting procedures and use of the water is required to be in accordance with the initial construction design. Since water may not be tendered/sold by the GoG, the RE Program and the MOU do not grant any rights associated with the water.

C. HYDRO PROJECTS

If the hydro projects listed under the RE Program were owned by the State of Georgia in the form of approved/designed projects with the exclusive rights to water or land attached, such projects could have been subject to tender and sale. However, under the RE Program, the Ministry of Energy ("MoE") of Georgia puts on its official web-site the list of potential renewable energy sources, which includes their probable plant sites and technical parameters. On behalf of the GoG, the MoE then "declares [invites] expression of interests for building, operating and owning power plants contained in the list of potential

sources of renewable energy". Given the prohibition on privatization of land sites adjacent to the rivers listed in the RE Program, what is being offered for the sites on those rivers are merely plans based on very general hydrological data. They do not represent the sale or grant of any intellectual property or a combination of dedicated/committed resources.

Theoretically, the GoG could also be inviting investors to bid under a concession. In fact, inviting investors to submit proposals on a build-own-operate ("BOO") basis (as declared under RE Program) implies a concession-based approach.

D. CONCESSIONS

Concessions are regulated by the *Law of Georgia on Concessions.* That law defines a concession as a "long-term lease agreement entered into by the State related to the exploitation of renewable or non-renewable resources and related activities for the purposes of facilitating foreign investments." Concessions do not transfer title to the resources or the objects of concession to the concession holder. Instead, under a concession the State grants the investor the right to use a natural resource and to enter into a profit-sharing arrangement. If the water is a non-alienable state-owned resource, a concession could have been viewed as an appropriate model for dealing with investors. However, the Resolution does not mention the *Law on Concessions* and the RE Program does not grant investors a long-term lease on land needed for the power house or the right to use the water resources. Whatever the rights are that are granted under the RE Program, they are not framed in terms of a concession and the MOU does not provide any of the rights associated with concessions. In addition, while it could be argued that the scope of the *Law on Concessions* seems to be applicable to the RE Program if the land required for construction of the HPP can not be privatized, the *Law on Concessions* has never been applied to HPP investments.

A final question that needs to be addressed is whether an investor could circumvent the procedures of the RE Program and still remain within legal boundaries. Construction of HPP is regulated by construction and environmental norms. The rights to use water would also fall under environmental regulations. Generation of power is regulated by the energy regulatory framework. In other words, prior to adoption of the RE Program, any investor wanting to invest into a hydro project, would do so under applicable laws and regulations which are still in force. Nothing in the RE Program contains any prohibition on using non-RE Program procedures. The prohibition on land privatization is applicable either way.

In conclusion, it is unclear what rights to land or water are being conferred on investors by the MoE under the RE Program in return for the obligation imposed to ensure winter supply for Georgia.

Recommendations:

(1) The legal nature of the RE Program and the tender process should be clarified to ensure consistency with Georgian law—either a concession model or procurement model--and standard international practice. Investors should also know whether it is still possible to develop HPPs outside of the RE Program.

(2) If the applicability of the *Law on Concessions* is confirmed, the GoG should adapt the RE Program to a public-private partnership ("PPP") model, which would include a public participation component with specific commitments on behalf of the GoG to confer rights, as well as obligations, on investors. These commitments should be made on behalf of ESCO and other government entities whose performance is critical to the investor. They include a guaranteed purchase of power and other forms of support from the GoG. as well as a balanced distribution of responsibilities under the concession agreement.

2.1.2. Application & Timing of Financial Commitments

Under the RE Program, an interested party may submit a Hydropower Plant Construction Application Form expressing interest in up to seven HPP sites. The Application requires the identity (including the location and description) of the site(s), the estimated dates for commencement and completion of construction, the estimated commercial operations date and the applicant's agreement to be bound by the terms of the MOU.

The timing of the commitments imposed on a potential investor at the application and MOU stage do not take into account the significant uncertainties an investor faces at the initial stage of a hydropower investment.First, in the absence of any reliable technical or financial data or studies in relation to the sites tendered under the RE Program, the investor faces unknown risks associated with the technical and financial feasibility of a project.

Second, the investor is obligated to completing a project by a date certain without knowing the outcome of the technical and feasibility studies and risks losing the financial guarantee provided in the event of a delay. This timing of the financial commitments in the tendering hydropower sites is one of the major drawbacks of the current RE Program.

Recommendations:

There are two alternative solutions to the timing problem:

(1) Sovereign Fund

The GoG has undertaken to create a Sovereign Fund, called the Georgian Energy Development Fund ("the GEDF"), to pool and nurture new projects up to the stage when their economic, financial, technical and legal feasibility is known. Up-front costs of the feasibility studies (and the risks) would be undertaken by the GEDF. Alternatively, the

GEDF could also allocate grants for feasibility studies for new sites that are not already the subject of commitments on the part of investors.

New projects would be marketed only after this stage of development is reached and financial commitments from investors would be demanded only at this stage. This is consistent with the approach taken towards investors in large HPPs, who are allowed to commit only after their feasibility studies produce positive results.

Further, although one might think there could be a conflict of interest in the process of selecting the sites (strategic/ state interests v. commercially profitable sites), the GEDFhas a self-interest in selecting sites that are most likely to be economically and financially viable, rather than being simplay a strategically valuable site, because the GEDF will want to be able to successfully sell them and roll the revenues received over to other projects. If a site is selected by the GEDF through an application to the MoE, then the MoE under current regulations must organize a tender in which private investors may bid on the projects.

A possible outcome of using a Sovereign Fund that is controlled by the GoG is that the GEDF could weight the State's strategic interest in having Winter supply, and the cost benefits of that supply (substitution of import and thermal power), more heavily than other issues and give HPPs that meet its strategic needs additional guarantees or incentives (tax breaks, guaranteed PPA, other). This may not be a problem for HPPs that want to export and are willing to pay for that opportunity, but is something that needs to be made transparent.

(2) Timing of Investment Commitments

Instead of imposing on the investor an obligation to commit under the MOU before feasibility studies have been conducted, it would be appropriate to allow the investor to first thoroughly study the site within a reasonable timeframe (or any period of time if there is no competition for the site) and only afterward enter into an MOU if the results of such studies are favorable. To allow this, the RE Program as well as the solicitations for expression of interest posted on the MoE website and any relevant published announcements in the future should be amended accordingly.

Alternatively, investor conducting feasibility study wishes to secure such site. If the MOU is not entered into, investor may loose the site. This needs to be settled per streamlined procedure.

2.1.3. Investor Selection Process

Using the shortest construction period and the highest bank guarantee to choose between competing bidders in the absence of a pre-qualification process and in the absence of quality feasibility studies may not be the best parameters for selecting a winning bidder. Proposing a shorter construction period is a short-cut to winning the

bid with the likely intention of renegotiating at a later stage, if certain objective impediments are purposefully omitted/not envisaged, or can lead to a high percentage of failures, if unqualified bidders are unable to obtain financing. This criterion is particularly inappropriate if coupled with the early stage commitment (i.e. entering into a MOU with GoG), when feasibility studies have not been undertaken.

The minimum bank guarantee required for HPPs under 100 MW has also been a major complaint of potential bidders, who point out that on a per MW basis, the bank guarantee is much higher than that required of potential investors in larger projects and that it unnecessarily burdens investors with financing costs before a project has even started construction and drawn down on bank loans. This burden would only increase if they have to bid up the bank guarantee against another bidder. Requiring the bank guarantee to be submitted before feasibility studies have been undertaken is viewed as particularly burdensome.

Recommendation:

The completion date and size of the bank guarantee should be the determining factors only:

(3) If objective pre-qualification criteria, such as industry experience and financial capacity, are applied to filter out inexperienced and undercapitalized developers;
(4) If sufficiently robust feasibility data is made available to allow for a reasonable assessment of the construction period;
(5) If the minimum bank guarantee is reduced to avoid unnecessarily burdensome up front costs; and
(6) As an alternative, the qualified bidders could quote a winter sales price for the power.

2.1.4. Memorandum of Understanding

The standard Memorandum of Understanding ("MOU") which investors execute with the GoG to undertake an investment project has the form and substance of a binding agreement under which parties are responsible and liable for performance of the obligations undertaken as well as compensation of damages. As already discussed above, there are no concomitant commitments made by the GoG and the timing of the commitments contained in the MOU is premature. The MOU binds the investor on the following matters: the site location; the plant's installed capacity; the investment amount and recovery period; time frames within which to obtain a construction permit, to complete construction and commence commercial operations; and the plant's annual generation production. All of this is taking place in advance of any feasibility studies conducted on the part of the investor.

Customarily, a MOU is more of a Letter of Intent expressing convergence of will between the parties, indicating an intended common plan of action. It is often used in cases where parties still need to negotiate the details of an agreement before making a legal commitment to proceed. The GoG MOU does not have the typical characteristics of a letter of intention. As such, it may discourage several types of

investors who have large corporate structures and heavy risk management procedures to undergo, prior to making commitments of the kind reflected in the text. Large companies normally have business development teams who explore global opportunities prior to making commitments to invest in the sector. Keeping the interest of such business development teams, and maintaining good relationships with such companies at that level could be beneficial to Georgia's HPP sector.

Indeed, prior to conducting feasibility studies on the site, the more typical form of MOU, which only expresses intentions about future actions of the parties, would be more appropriate than the MOU used by the MoE. Once the feasibility studies are completed and the results are positive, then the GoG and the investor (together with newly incorporated entity) can enter into an implementation agreement where the commitments of both parties and all other terms are spelled out. At such stage, all technical, geographic and financial parameters of the plant would be known and commitments could be made in a fully informed manner. In the MOU, GoG would grant the investor a reasonable time period to conduct the feasibility study and, if the feasibility studies are not completed on time, make the site available for other potential investors again.

Assuming the MOU continues to be used in its current form, as a binding agreement between the MoE and the potential investor, significant revisions need to be made to clarify the obligations of the GoG and provide more reasonable terms for the obligations of the investor. In addition to the problems identified at the beginning of this Report, other issues and concerns in the standard text of the MOU include:

- The MOU structure, format of commitments, and drafting techniques need refinement to make it a complete agreement. When the text of an offered agreement is non-negotiable, it should be up to the best international standards.
- Investors in HPPs below 100 MW in size are not allowed to participate in structuring the MOU while this is permitted in the case of HPPs over 100 MW. This could be a disincentive for investors who would like to negotiate the terms. Changes could be minor but such rigid approach to observing the standard text could be a disincentive.
- The consequences of a breach of the MOU are not scaled according to the stage of investment implementation. In other words, if a breach occurs when the HPP is 80% complete, the penalties for a breach should be much less than if the breach occurs early on. This disproportionate risk of breaching the MOU may increase the cost of financing for investors.
- Requiring the full amount of the bank guarantee to remain in place over the full period of construction ignores the GoG's security/collateral that exists in the form of the improvements made by the investor in constructing the HPP.
- Lenders are not given step-in rights in the event of a default by the investor. Customarily, lenders to an infrastructure project will want the right for a "cure" period to cure the default and the right to step-in and take over the project if

the investor is unable to do so. Lenders need the ability to ensure the repayment of their loans.

- The MOU is executed only by the investor, GoG and ESCO, while there are other players that have a role in the cycle of power generation and sale but are not signatories to the MOU. These parties, such as the Ministry of Economy (which is the shareholder of GSE and indirectly Energotrans), GSE and Energotrans, are directly involved in the success or failure of an HPP. They should therefore be signatories to the MOU. Not having them as parties to the MOU creates uncertainties/risks for the financiers of the investment projects. If an Implementation Agreement is introduced, it should be signed by all relevant parties to make it and the project more bankable.
- Commitments which should be undertaken by the GoG or implemented under its control are not reflected in the MOU (access to the transmission lines, capacity allocation and congestion management, for example). There is no single document, forum or law in which commitments for an overall legal and regulatory framework to enable access to the Turkish market are spelled out. An investor needs assurances regarding transmission rights and capacity allocation, both of which are critical for the reliability of the financial modeling of the investment project. Without creating certainty in this area, it will be difficult to attract investors.
- Prior to having the results of a feasibility study, it is not possible to secure the total investment required for implementation of the investment project on an unconditional basis, as required under the MOU. This is particularly true if the investor plans to share costs with other entities or involve debt financing.
- The MOU contains a dispute resolution mechanism which may be unacceptable to foreign invesetors. Since the State is a party to the MOU, international arbitration (for example, at the International Centre for Settlement of Investment Disputes) would be a preferred choice. Many credible investors as well as their financiers would perceive the forum imposed by the MOU as an additional legal risk, particularly in the absence of step-in rights for lenders.

Recommendations:

(1) Unless feasibility studies are addressed through creating a GEDF, the MOU should divide commitments into two stages: pre- and post-feasibility stages. Most of the commitments should be pre-conditioned on having positive results from the feasibility studies. The results of such studies should be reported to the GoG. For large HPPs, the GoG uses Implementation Agreements ("IA"), which provide better defined terms and conditions and commitments on the part of the GoG. This approach could be replicated for small and medium plants;

(2) Revise the MOU to address some of the gaps related to the format and content of the MOU.

(3) If a decision is made to change the nature of the MOU to align it more closely with the customary definition of an MOU, a standard text of the MOU and a separate standard IA should be prepared;

(4) Investors should be able to participate in negotiations and structuring of the MOU. Further, involvement of each and every investor and its legal counsel may have a developmental/ improvement effect on the standard text as further gaps, concerns and sensitivities are revealed. Tackling these over time will have a positive effect;

(5) If the GEDF replaces the GoG in granting "concessions" over some HPP sites, conditionalities and commitments contained in the MOU executed in the future should be passed through the share purchase agreements, in which case a standard form of such share purchase agreement should be carefully elaborated as well;

(6) Lenders should be given "cure" rights and step-in rights in the event of investor default;

(7) The consequences of breach of the MOU (or IA) should be made fair to all parties in relation to the value created by the investor and real damages experienced by the State;

(8) The MOU (or IA) should add other parties other than the GoG and ESCO (GSE, EnergoTrans or other network owner to whose network hydro should connect, and possibly the Ministry of Economy). Alternatively, standard agreements (transmission services agreements with GSE & Energo Trans) should be (signed and) appended to the MOU, or the IA.

(9) There should be a fair and clear mechanism for revising the time schedule for project implementation in case of force majeure or illegal acts of the GoG. If delays occur, the investor's financial model will suffer. Defining the financial consequences of illegal acts of the GoG (possibly in the form of liquidated damages) could also be added; and

(10) Stransparent/explicit mechanism for establishing tariffs for the mandatory electricity sales to ESCO in the winter months should be established.

2.1.5. Quality of Standard Agreements

The MOU, the GSE Direct Contract on Electricity Dispatch and Transmission Services, the Transmission Services Agreement with Energotrans, and the PPA with ESCO, are not bankable in their current forms. Some of the defects of the MOU have been described above. The other agreements do not meet international best practices standards and will add to investors' transaction costs if they are required to redraft all of those agreements to make tem acceptable to lenders.

Recommendation:

The agreements should be revised to reduce investor transaction costs. HIPP's lawyers are currently reviewing the standard form contracts and will provide the MoE with recommended changes.

2.1.6. Bank Guarantee

A bank guarantee is a valuable instrument to ensure full implementation of an investment project; however, obtaining a bank guarantee can be a burdensome requirement if the timing for the bank guarantee is misplaced, as is the case with the 2008 RE Program. No security is available locally, as the land parcel is only transferred to the investor at a much later point in time than when a bank guarantee has to be furnished. On the other hand, a foreign investor may not be willing to expose its foreign assets to local legal and project risks. Dealing with local banks is difficult, particularly if the collateral issue is not straightforward because there are no local assets to be pledged for security. Georgian banks would not be able to take foreign assets as security in an acceptable and cost-effective manner.

The timing of the bank guarantee is also inappropriate, as noted earlier. If the feasibility studies do not produce positive results, the bank guarantee may be released by the GoG. Timing of the bank guarantee is therefore not appropriate as the decision to implement investment project is made at a later stage.

Once the project is under implementation, the bank guarantee may become an unnecessary burden, since in case of failure of the investor, the GoG is entitled to reposess the land and consequently all improvements on such land which would have a much higher value at that stage.

Recommendation

(1) It is advisable to shift the requirement of the bank guarantee to the stage where investor makes a final decision to invest, based on the results of the feasibility studies. It would be more appropriate to require a Bank Guarantee at the time of execution of an Implementation Agreement as suggested above.

(2) Other forms of comfort should be considered: for example, a lien over other assets owned by the investor in Georgia, or a collateral guarantee by another guarantor. The MoE should be open to serious suggestions from investors that provide equivalent security.

(3) GoG should aknowleadge that as the project develops and investmnets/improvements on the project site are made, there is a lot more at stake than the bank guarantee. Therefore, bank guarantee could be relinquished and investors saved from unnecessary costs.

2.1.7. Guaranteed Power Purchase Agreement

The Guaranteed Power Purchase Agreement (“PPA”), while framed as a guaranteed off-take agreement by the GoG, should be viewed more as an obligation to sell. Georgia has a winter deficit and the RE Program is intended to displace thermal power generation and winter imports. The RE Program is also intended to reduce tariffs to the general population by displacing more expensive thermal power. Mandatory winter sales by hydros will also have marginal but positive effect on the

overall reduction of the annual weighted average prices of electricity in Georgia. The PPA is therefore of greater benefit to the GoG then to the sellers.

From the Seller's perspective, the PPA may prove problematic. First, the RE Program deals with HPPs of any size under 100 MW. This wide range of HPP size allows for significant differences in market appetite among the investors. Those investing in large HPPs targeting exports may not be happy with the mandatory sales of their entire output in the winter months to ESCO.

Second, it is unclear how the price of electricity to be sold to ESCO in the three winter months will be formed over the 10-year period that an investor is required to sell power in Georgia. As currently proposed, the price paid in the winter months will be based on the highest price paid for imported power and the production price of the thermal power plants. This price could vary dramatically over a 10-year period, and will be affected by numerous factors, including inflation, cost of fuel and demand. This makes it difficult for investors to calculate their cash flow over the 10-year period and has a negative impact on the financial model of the plant/project.

Third, new HPPs are deregulated and have to negotiate a price with the Government. Existing HPPs and deregulated small HPPs sell electricity to ESCO for upper margin tariffs established by GNEWRC or for the highest price paid by ESCO to any producer during six winter months (September 1 to May 1). New HPPs are therefore discriminated against because the ESCO only buys from them during three winter months. For smaller new HPPs, longer PPAs (at least six months) could be critical, as their ability to negotiate Turkish contracts (without an association or similar aggregation mechanism) would be limited. For those HPPs, a 10 year commitment for three winter month purchases will also be insufficient to obtain financing. Even if new HPPs were to get the price paid to existing HPPs, they would still not be able to provide banks with a known cash flow because the price would vary every winter.

Fourth, and finally, for comparatively large, capital-intensive HPPs the guaranteed power purchage agreement with ESCO and its credit quality would likely be insufficient for lenders.

Recommendations:

(1) A methodology or transparent mechanism for formation of the price of electricity to be sold to ESCo in the winter months over the term of the PPA should be developed to provide some certainty of cash flow for investors;
(2) The methodology or price formation mechanism should recognize that winter sales have a positive effect on the total costs of Georgian power system and take this factor into account;
(3) The term for mandatory sales of power in the winter months should be extended beyond 10 years;
(4) If an investor prefers to sell abroad for competitive prices, there should be an alternative framework to the mandatory winter sales;

(5) The GoG should provide for, or cause procurement of, credit enhancement for the ESCO.

(6) The GoG should consider providing new HPPs with an opportunity to participate in the local market during the non-winter months.

2.1.8. Capacity Allocation on International Interconnection

Transmission users do not pay a capacity fee and therefore do not have reserved capacity on the GSE or Energotrans transmission lines. In the event of congestion on the international interconnection with Turkey, the Market Rules currently provide that capacity will be allocated based on the highest price of the electricity to be exported. The capacity on the interconnection is assumed to be 650 MW, while some of the largest HPPs are in the range of 450 MW. Small and medium HPPs may not be able to get access to the interconnection, even assuming they are able to sell into the Turkish market (see below). Without assured access to the export line, they may not be able to get financing.

Recommendation:

There are two alternatives to addressing the access problems of small and medium HPPs:

(1) The Electricity Law and the Market Rules could be amended to provide domestic renewable energy produced by the HPPs constructed under the RE Program with guaranteed priority access to the interconnection/transmission line; or

(2) A percentage of the capacity on the international interconnection could be set aside for small and medium-sized HPPs.

2.1.9. Reserve Capacity Fee

Under the current legal framework, the ESCO is obligated to buy (i.e. compensate power plants for) reserve capacity from defined sources (thermal power plants) in order to maintain system stability. The *Law on Electricity and Natural Gas* and the Market Rules define the source of reserve capacity as thermal power plants selected by GoG, which can be synchronized with the power system of the country within 24 hours. Distribution companies, direct consumers and exporters are required to compensate ESCO for such reserve capacity. The charge is therefore levied against buyers (the consumer side) and not against producers. Existing HPPs which do not export power do not pay this charge. New hydropower plants will be required to pay a reserve capacity charge for power they export, in proportion to their share of the total volume of power exported and purchased by direct customers and distribution companies. In other words, as exporters, new hydro power plants will be considered to be consumer side.

The tariff for reserve capacity is set by GNEWRC as a daily fee to be paid to the source of reserve power (i.e. the thermal power plant) over an agreed/approved number of days a year. The annual aggregate cost of reserve capacity fees for new HPPs can be quite significant, particularly if exported the hydropower is

comparatively large and the proportion of exports in relation to the volumes of distribution and direct consumers' consumption increases over the next few years.

Because Georgia has not been a significant exporter in the past, this has not been an issue for exporters. But for new HPPs that will not find a market for power in Georgia during the non-winer months, paying this fee could affect the financial viability of project. While exporters use the transmission grid and arguably should be required to contribute to the cost of maintaining system reliability, exporters are already being required to pay 100 per cent of the costs of all new lines. Those new lines (with the exception of the Akhaltsikhe to Borcka line) provide significant reliability to the grid in Georgia. Exporters are therefore paying twice for reliability – once through the reserve capacity fee and once for the physical assets that provide the reliability.

Recommendations:

If the new HPPs are required to pay 100 per cent of the cost of the new ines from Zestaponi and Gardabani to Akhaltsikhe, the *Law on Electricity and Natural Gas* and the Market Rules should be amended to exempt new HPPs as exporters from paying reserve capacity fees.

2.1.10. Small HPPs Size Disadvantages

Small HPPs ("SHPPs") will not have the marketing ability or creditworthiness needed to sell into the Turkish spot market or to execute bilateral contracts with the major players in Turkey's electricity market on an individual basis.

Further, if they want to sell to eligible customers in Georgia, the threshold for eligible customers is still quite high, even though a long-term PPA with an eligible customer, with a fixed price or ties to an index, could be the best solution for small HPPs to obtain financing.

Recommendations:

(1) The Electricity Law should be amended to allow a creditworthy aggregator to aggregate the production of small HPPs; such an aggregator should be created as a commercial entity. Even though ESCO is a limited liability company, it does not have the authority under its founding documents to aggregate supplies for sale into Turkey's spot market and it may not meet the required credit standards to be a market participant.

(2) The annual consumption threshold for entering into a direct agreement with customers should be lowered at an accelerated pace, in lieu of the current planned time frame (2017).

2.1.11. SHPPs' Access to Retail Customer

Under Article 23[4] of the *Law on Electricity and Natural Gas*, small deregulated hydropower plants ("SHPPs") are allowed to sell directly to retail consumers. In addition, the law guarantees third party access to the transmission grid and/or

distribution network for a fixed tariff. In accordance with Article 46[1] a distribution licensee is obliged to allow wheeling of electricity through its network for those persons who are allowed to sell electricity directly to consumers. "Consumers" are defined under Article j [1] of the law as including both retail and wholesale consumers.

In practice, these rights are mostly unenforceable. Distribution licensees will always have a conflict of interest, because they also own SHPPs, and often refuse to grant access to their distribution networks to non-affiliated SHPPs. Neither EnergoPro nor Telasi have wheeling tariffs established for wheeling electricity from a deregulated SHPP to a retail customer. EnergoPro and Telasi also hold certain exclusive rights by virtue of the investment agreements executed when they were privatized.

The combination of all these factors result in a denial of access to distribution networks for SHPPs and an inability to exercise the rights granted under the Law on Electricity and Natural Gas.

Recommendation:

Strengthen the law and regulatory norms to enable due enforcement of the rights granted to SHPPs.

2.1.12. Other Issues

Some investors may be interested in a BOT scheme or classic debt financing for HPP projects for which no framework currently exists.

Recommendation:

The GoG should allow for other forms of financing for HPP projects. These could include: PPP, BOT, and other forms of debt or equity financing. The GEDF may facilitate new structures and as a consequence provide this type of financing flexibility**.**

2.2. LARGE HPP PROJECTS

The GoG provides more flexibility in its approach for large HPPs of 100 MW or larger; however most of the issues discussed above also apply to large HPPs. Specifically, the price paid under the guaranteed PPA with ESCO, ESCO's credit quality, access to transmission lines, the availability of transmission capacity on the international interconnectors, and the bankability of the dispatch, transmission, and PPA agreements, are all issues of concern to large HPPs. The "first-come, first-served" principle of allocating access on the Akhaltsike to Borcka line may not be a problem for the first large HPP to come on line but the limit of the interconnection capacity to 650 MW could pose a problem for the next large HPP. In addition, the technical conditions for interconnection, final transmission costs, and tariff methodology for accessing the transmission grid are not finalized and could be subject to negotiations with GSE.

Recommendation:

In addition to the relevant recommendations provided above, a standard procedure, with standardized, transparent and non-discriminatory terms, should be developed for allocating capacity. Further, such procedure should also deal with and disclose the Dispatch Licensee's preemption rights.

3. PERMITTING ISSUES

3.1. CONSTRUCTION AND ENVIRONMENTAL IMPACT PERMITS

The construction permit and environmental impact permit are issued in a single unified procedure, but an environmental impact permit is one of the prerequisites for issuing a construction permit. While the one-stop-shop principle carries many advantages and should by no means be abandoned, it is unclear whether the unified approach is the best solution for HPP investors. Environmental issues have to be assessed before a construction design is adopted or engineering implemented. Going through an environmental impact permit procedure and obtaining an environmental clearance prior to receiving a construction permit could be a comfort for the investor.

Georgian investment promotion legislation provides for the one-stop-shop facility through the Investment Agency. Of significant benefit is that it provides for the possibility to obtain preliminary licenses and permits, subject to later compliance with the requirements. However, due to the lack of industry expertise and human resources, the Investment Agency may not be effective in assisting investors to navigate the numerous procedures and preparation of documentation needed for both permits. This lack of expertise and resources may cause undue delays in issuing the environmental impact permit.

In addition, regulation of construction undergoes frequent changes. Under the new *Law on Control of Technical Hazards,* adopted in April 2010, the GoG is required to issue a resolution defining objects of increased hazard. The definition of objects of increased hazard serves as a basis for issuing construction permits; however, the GoG resolution is still pending. In October 2010, the initial deadline for issuance of a resolution was extended to January 1, 2012.

Prior to adoption of the *Law on Control of Technical Hazard*s, HPPs with an installed capacity of less than 2 MW were not required to obtain a construction permit. Currently, it is unclear whether this threshold will be preserved and which types of HPPs will not be subject to a construction permit.

Recommendations:

(1) The GEDF could play the role of a single point of contact in assisting investors with permits for new projects for which an MOU has not yet been executed. If it is given this role, the GEDF should have a standardized data base and the ability to network and act as an intermediary with various state agencies on behalf of the investor, thus providing comfort for investors. In addition, if acting as the point of contact for future investors, the GEDF should always have updated and accurate information about all implementation

requirements for an HPP investor, including permitting, construction, land rights and water rights.

(2) The GoG should adopt a resolution defining objects of increased hazard.

(3) The GoG should clarify whether HPPs below 2 MW will be required to obtain a construction permit.

3.2. LAND RIGHTS

Since the land is an important asset for the HPP project, it is critical that such land be transferred to investor/project entity with clear title. This often is a problem as some of the land parcels were not originally registered under the ownership of the state. This could be an issue for the whole or part of the required land parcel. Depending on the timing of such title clearance, the project could be delayed, since the construction permit cannot be obtained without verifiable title. Any delays in commencement of construction are costly to the developer. On the other hand, once the land is registered in the name of the investor, property tax would start accruing until the HPP located on such land commences generation of power.

In addition, under the new *Law of Georgia on State Property,* land parcels adjacent to the rivers may not be privatized at all. Precise Y and X coordinates of the land areas subject to tjhis prohibition are identified by an order of the Minister of Economy which is not generally available. If such land parcels are agricultural, the GoG may agree to privatization at the request of the Ministry of Economy. Such request must be supported by the importance of the project. The law or sublegislative acts do not provide for any particular parameters to define important projects or details regarding the procedures for the Ministry of Economyt to initiate such request. If the land adjacent to the rivers is not agricultural, the investor would need to enter into a long-term lease agreement with the state, represented by the Ministry of Economy. At his point, the status of the land bordering the rivers is unclear.

Recommendations:

(1) For the sake of expediency, all site locations offered to investors and land parcels necessary for construction on such sites should be reviewed and appropriate procedures for allocating property rights should be undertaken. Data files should be created for the projects which involve several parcels of land with different ownership or status. The data should be aimed at supporting and expediting the process of negotiations by the investor with the owners of the different parcels to introduce more certainty in the timing of the construction.

(2) If a land parcel needed for a particular project involves a restricted status, the GoG should clear it prior to introducing investors to the site.

(3) Tax breaks should be considered in relation to the property tax on land used for the construction of HPPs, at least up to the time when an HPP commences commercial operations.

(4) Specific rules for assigning important status to HPPs and the procedure for requesting such status to allow for privatization of the land parcels should be issued.

(5) If such land parcels necessary for building the HPP may not be privatized, the RE Program should allow for leasing of the property for more than 49 years (which is the maximum term of for leasing of surface land under Georgian law).

(6) Alternatively, the *Law on State Property* should be amended to explicitely reflect the importance of the land parcels adjacent to the rivers listed in the RE Program as parcels designated for construction of HPPs. Otherwise, there could be projects, other than HPPs, which could be qualified as important by the Ministry of Economy and allow privatization for conflicting uses. The current law does not eliminate the potential for such overlap or conflict, even though this may have been the poriginal intent of the law.

3.3. EMINENT DOMAIN

Georgian legislation provides for *eminent domain* procedures if negotiations to acquire property from a private party fail. However, *eminent domain* procedures may only be initiated under circumstances of state importance listed in the law, which currently do not include construction of an HPP. Further, the decision on expropriation is adopted by the court only. The completion and conclusion of *eminent domain* procedures therefore may be lengthy and create risks and uncertainties as to the final outcome, costs and timing of a decision.

Recommendations:

(1) The list of the circumstances/cases in which eminent domain proceedings may be initiated should be clarified to include construction of an HPP as an event of state importance.

(2) As the right to a fair court proceedings is protected by international instruments like European Convention on Human Rights, its impossible to restrict the right of a party to dispute the valuation of the land parcel in question or any other aspect involved in eminent domain proceedings; however, some procedural simplifications could be introduced (for example, offering land owners the option of expert mediation or binding arbitration if the only issue in dispute is the value of the property) to make the whole process final much earlier than under the currently applicable standard litigation process.

3.4. WATER RIGHTS

If an investor needs water from irrigation reservoirs, use of such water could affect the financial feasibility of the project. Irrigation companies which are responsible for rehabilitation of the Georgian irrigation assets and organization of irrigation services charge very high fees to secondary users of water, such as HPPs.

In addition, a tax applies to the use of water from Black Sea and Caspian basins as well. It is also unclear whether certain mountain tops and rivers fall under the restricted category of water. The GoG has not promulgated the normative acts to clarify which rivers and water sources are restricted or free.

Recommendations:

(1) A specific approach should be adopted for HPPs, which are secondary users of irrigation water discharging it back. Irrigation companies are state owned and their approach and/or rates should be revised so that they are not permitted to charge monopoly fees, but are governed by specific standards and rules in relation to HPPs.

(2) Investors should be relieved from the water tax, which could affect a project's profitability and reduce the overall potential of attracting debt/equity investment in a particular project.

(3) A normative act with the list of the rivers and water sources falling under a restricted category under the Water Law of Georgia should be promulgated.

3.5. LICENSING

Although the general legal framework allows for issuing preliminary licenses, GNEWRC's right to issue preliminary license is not clearly defined under the law and may create confusion on the part of investors, as well as GNEWRC.

Recommendation:

GNEWRC should be provided with explicit authority to issue preliminary licenses for generation.

4. STANDARD AGREEMENTS ISSUES AND MARKET RULES

The standard agreements presented to potential investors do not meet international best practices and are not bankable as currently drafted. Specific recommendations and suggested amendments to the standard agreements will be made in a follow-up report.

Finally, the Market Rules applicable to the Georgian power market contain certain inconsistencies which may have a negative effect on hydropower investors. These issues will be discussed in a second follow-up report.

USAID Hydropower Investment Promotion Project (USAID-HIPP)

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