Early Warning System

MIGA-12300

Adjaristsqali Hydro Project

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Quick Facts

Countries	Georgia
Financial Institutions	Multilateral Investment Guarantee Agency (MIGA)
Status	Proposed
Bank Risk Rating	A
Voting Date	2014-06-12
Borrower	Tata Power International Pte. Ltd.
Sectors	Energy, Hydropower
Investment Type(s)	Guarantee
Investment Amount (USD)	$ 63.00 million
Project Cost (USD)	$ 427.00 million

Project Description

The investment project involves the construction and operation of the 184 megawatt Shuakhevi hydropower project, consisting of the 178 MW Shuakhevi plant and the six megawatt Skhalta plant, as part of the Adjaristsqali cascade of four run-of-the-river hydropower plants with a total planned installed capacity of 400 megawatts. According to the project environmental impact assessment (EIA), "[t]he Government of Georgia (the Government) has prioritised the development of renewable and alternative sources of energy. Long term goals include the replacement of thermal generation, realisation of Georgia's hydropower resource potential and the attraction of foreign investment in energy projects. Hydropower development on the Adjaristsqali River is considered by the Government to play an important role in achieving these objectives. According to the MIGA documentation: "The country has a large pipeline of hydro projects for which the Georgian government is actively seeking foreign participation."

According to the IFC, the proposed investment, the Shuakhevi hydropower is a "184 MW hydropower scheme comprised of two dams (39 m and 22 m in height, respectively) with reservoirs on the Adjaristsqali and Skhalta Rivers; a 5 m weir on the Chirukhistskali River; a 6.4 km tunnel from the Chirukhistskali River through to a 6 MW Hydro Power Plant (HPP) on the Skhalta river; a 9.4 km tunnel from the Skhalta and Chirukhistskali rivers to the Didachara reservoir on the Adjaristsqali River; and a 18 km tunnel from the Didachara reservoir to the 178 MW Shuakhevi HPP."

The project will export power to Turkey through the 400 kV Akhalskhe-Borcka cross-border transmission line for nine months of the year, and sell domestically for three consecutive winter months for the first 10 years of operations. In order to connect to the state grid, a 220kV transmission line from the power station to the national grid is being built with financing from the World Bank.

Specific project components are as follows:

Shuakhevi Scheme (181 MW)

- Dam and reservoir on the Adjaristsqali river at Didachara;
- Dam and reservoir in the upper reaches of the Skhalta River;
- One weir to allow abstraction and sediment basin on the Chirukhistsqali River;
- Transfer / headrace tunnel between Chirukhistsqali weir and small capacity Hydro Power Plant (HPP) at the Skhalta dam HPP (6 MW)
- Transfer tunnel between Skhalta dam and Didachara reservoir; and
- Headrace tunnel from Didachara dam to the main HPP unit near Shuakhevi village the (175 MW).

Koromkheti Scheme (150 MW)

- Dam and reservoir on the Adjaristsqali River near Khichauri;
- Weir on the river Chvanistsqali approximately 500 m north of the Khichauri dam;
- Weir on the Akavreta River approximately 5.5 km south east of Keda; and
- A series of connected tunnels to divert water from Chvanistsqali weir, Khichauri dam and Akavreta weir to an underground HPP near Koromkheti village (150 MW).

To support the main works the following activities will also be required for construction and / or maintenance

- Land acquisition associated with temporary and permanent structures;
- Development of borrow pits to provide aggregate for road building;
- Excavation of temporary and permanent access portals (known as adits), initially to construct underground infrastructure including tunnels and subsequently during operation for maintenance;
- Erection of temporary worker accommodation;

Early Warning System Project Analysis

RISK CATEGORIZATION

The project is a category A under MIGA's Policy on Environmental and Social Sustainability. A proposed investment is classified as Category A if it may have potentially significant adverse social or environmental impacts that are diverse, irreversible, or unprecedented. The Assessment is based on the IFC's assessment in accordance with its Policy on Environmental Social Sustainability. IFC documentation states that "[t]his is a Category A project due to diverse and potentially significant adverse risks posed across multiple sites to, among others, hydrology/ecological flow, land use and ownership, biodiversity, dam safety and community/worker safety. All of the IFC's Performance Standards (PSs) are triggered by the project with the exception of PS 7: Indigenous Peoples (IPs), as no IPs have been identified in the project area."

APPLICABLE SOCIAL AND ENVIRONMENTAL STANDARDS

PS 1 - Assessment and Management of Environmental and Social Risks and Impacts
PS 2 - Labor and working conditions
PS 3 - Resource Efficiency and Pollution Prevention
PS 4 - Community Health, Safety and Security
PS 5 - Land Acquisition and Involuntary Resettlement
PS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources
PS 8 - Cultural Heritage

People Affected By This Project

ENVIRONMENTAL AND HUMAN RIGHTS RISK ASSESSMENT

Project documentation states that [t]he Project is located within the mostly rural municipalities of Khulo, Shuakhevi and Keda. Residential areas that may be affected by the Project mostly comprise small villages and the total population in the vicinity of the Project is approximately 15,000. The Ethnic Georgians (largely of Christian Orthodox and Muslim denomination) represent the majority of the local population.

The following assessment is based on information derived from the environmental and social impact assessment. According to the project EIA, those people that may be affected by the Project include:

- Villagers, farmers, and land owners working closest to the construction sites;
- Unemployed people looking for work on the Project, especially the unskilled;
- Residents whose land has been physically or economically acquired for the project, especially those that have not acquired replacement land.
- People displaced by natural disasters.

The EIA also states that "[t]he potential for the Project to have combined environmental and social effects with other existing and planned projects was considered. The assessment undertaken to work out these types of combined effects is known as a Cumulative Impact Assessment (CIA). CIA was integrated within the environmental and social assessments carried out for the Project and took into account the potential effects arising from the following known existing and planned developments:

- Existing Asti Hydropower plant (HPP);
- Existing Machakhlistsqali Hydropower plant (HPP);
- Existing Chirukhistsqali HPP;
- Proposed Chorokhi hydropower cascade project;
- Local tree felling;
- Upgrade of the S1 highway;
- Ski Resort on the Chvanistsqali Valley;
- Goderdzi Pass Ski Resort (Khulo Municipality);
- Gomarduli Ski Resort (Shuakhevi Municipality, Gomarduli Village); and
- Goma Mountain Ski Resort (Shuakhevi and Keda Municipalities)."

IFC documentation states that "[t]he main cumulative impacts identified in the ESIA include those on aquatic ecology (including impacts on the fish populations and spawning habitats) during operations, and traffic during the construction phase of the Shuakhevi scheme". Therefore, where it is possible for cumulative impacts to be identified, it has been noted in the relevant subsection of the analysis.

LABOR RIGHTS

According to project documentation, "the project will require a peak construction labor force of around 800 workers. Construction works will be underway 24 hours a day, seven days a week and are likely to consist of three shifts of eight hours or two shifts of ten hours. During operations, the workforce is likely to comprise 60 full-time employees."

However, IFC indicates that "[s]ocial studies undertaken for the ESIA identified the potential for several adverse effects on local communities. When major infrastructure projects are developed they can encourage outsiders to migrate into an area in the search for work such as, for example taxi driving or clothes washing. This process is known as 'induced development' and can lead to changes in the local population and cultural tensions can develop." According to recent studies, the 'boomtown effects'

Investment Description

- Multilateral Investment Guarantee Agency (MIGA)

The investment project consists of an equity investment by Tata Power International Pte. Ltd. of Singapore in the Adjaristsqali Hydro Project in Georgia.

MIGA provides political risk insurance (guarantees) for eligible projects in order to allow investment in emerging markets. The investor has applied for a MIGA guarantee of $64 million for a period of up to 15 years against the risks of transfer restriction, expropriation, war and civil disturbance, and breach of contract. MIGA documentation indicates that "the International Finance Corporation (IFC), the European Bank for Reconstruction and Development, and the Asian Development Bank are expected to provide debt financing for the project."

A MIGA guarantee against risk of transfer restriction "[p]rotects against losses arising from an investor's inability to legally convert local currency (capital, interest, principal, profits, royalties, and other remittances) into hard currency (Dollar, Euro or Yen) and/or to transfer hard currency outside the host country where such a situation results from a government action or failure to act."

A MIGA guarantee against expropriation "[p]rotects against losses arising from certain government actions that may reduce or eliminate ownership of, control over, or rights to the insured investment. In addition to outright nationalization and confiscation, "creeping" expropriation a series of acts that, over time, have an expropriatory effect is also covered. Coverage is available on a limited basis for partial expropriation (e.g., confiscation of funds or tangible assets)."

A MIGA guarantee against war and civil disturbance "[p]rotects against loss from, damage to, or the destruction or disappearance of, tangible assets or total business interruption (the total inability to conduct operations essential to a project's overall financial viability) caused by politically motivated acts of war or civil disturbance in the country, including revolution, insurrection, coups d'état, sabotage, and terrorism."

Lastly, a MIGA guarantee against breach of contract "[p]rotects against losses arising from the government's breach or repudiation of a contract with the investor (e.g., a concession or a power purchase agreement)."

Overall, "[t]he total project cost is estimated to be US$427 million ($367 million excluding financing costs). It will be developed by Adjaristsqali Georgia LLC (AGL), a special purpose vehicle owned by Clean Energy Invest of Norway, Tata Power of India and IFC Infraventures."

The IFC indicates that "[t]he SPV was established for the purpose of constructing and operating a cascade of hydroelectric power plants on the Adjaristsqali River. The cascade was originally proposed to include three phases, namely the 185 MW Shuakhevi scheme, the 150 MW Koromkheti scheme and the 65 MW Khertvisi scheme. However, detailed assessments of each of the phases identified significant economic and environmental risks in the Khertvisi scheme, including potential impacts within the boundaries of the planned Machakhela National Park. As a result, AGL has confirmed that, although it retains the concession for the Khertvisi scheme, this scheme will not be pursued."

However, documentation reflects that "AGL intends to construct the Shuakhevi and Koromkheti schemes in sequence, with financing being sought initially for Shuakhevi (this investment). If developed, the downstream (Koromkheti) scheme will comprise a 19 m dam and reservoir on the Adjaristsqali River; two weirs (an 8 m weir on the Chvanistskali River and a 5 m weir on the Akavreta River); a 0.67 km tunnel from the Chvanistskali River; a 9.5 km tunnel from the Akavreta River to the Koromkheti reservoir; and a 15 km tunnel from the reservoir to an underground powerhouse near Koromkheti village, then back into the Adjaristsqali River."

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CONSULTATION PROCESS

The IFC documentation reflects that "environmental and social impact assessment (public) scoping meetings began on July 19 and 20, 2011, with four meetings in key municipalities and six village meetings. Further meetings have been held in 2012 and 2013 to discuss ESIA findings and associated mitigation measures. AGL has also held/hosted a series of smaller, focused meetings and workshops with key informants and groups that began in September 2011 and have continued to date. For example, dedicated meetings with NGOs focused on environmental and social matters were held in 2011, 2012 and 2013 to present the project, development team, proposed studies and impacts, mitigation measures, etc., and to capture NGO feedback and input."

The IFC also indicates that "[f]ocus group meetings and discussions have been held with vulnerable groups, municipal leaders, affected landowners and women's groups throughout the process. A stakeholder workshop on the Biodiversity Action Plan (BAP) was held on 14 September 2012, aiming to identify and/or verify key conservation objectives, baseline information gathered and associated mitigation measures. This workshop, along with the NGO meetings held, led directly to the involvement of several conservation-focused NGOs in project monitoring, as described above in the PS6 section. Another stakeholder workshop on the Biodiversity Action Plan was held on 10 September 2013 to update the stakeholders of the biodiversity mitigation measures and monitoring programs, and to seek suggestions from them."

The project's environmental and social impact assessment states that "[t]he views of local people on the Project have been sought and considered through formal stakeholder engagement activities that commenced at the start of the ESIA process. Stakeholder engagement activities undertaken and planned for the future are documented in the Stakeholder Engagement Plan." The "[k]ey concerns raised during public consultation in affected communities were related to potential project impacts on local climate; land acquisition and compensation; landslide risks; water levels in the river; employment opportunities and whether the communities were to benefit from low electricity prices. Regarding concerns as to whether the project would have an effect on the local climate by increasing humidity, as no large reservoirs are part of the scheme design the effect on local climate is considered to be minimal."

Additionally, documentation reflects that "[t]here was also a general concern on the possibility of erosion and the likelihood of landslide activation and whether the AGL would take responsibility for any repercussions these effects may cause. The project development team has stated that great care was taken during project design to assess the potential land slide risk areas, and the scheme has been developed and modified to limit risks on any sensitive areas. As a result, only low risk sites were chosen to position the dams/weirs, reducing the likelihood of landslides to a minimum. If an event resulting from the scheme does occur, AGL will take responsibility."

The IFC also states that "[t]he project was perceived by some stakeholders to have a negative effect on water levels particularly in the Adjaristsqali River, potentially affecting communities' water supply and sewage systems. Although the project will affect overall existing water levels, the greatest impacts will be close to the dam sites (i.e. far from settlements) and a minimum ecological flow will continue to be released at each dam, in addition to additional inflows from side streams