



**The World Bank**

Additional Financing to Energy Community of South East Europe APL Program APL 5 for Albania Dam Safety (P166469)

# Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 16-Mar-2018 | Report No: PIDISDSA24089



**BASIC INFORMATION**

**A. Basic Project Data**

Country Albania	Project ID P166469	Project Name Additional Financing to Energy Community of South East Europe APL Program APL 5 for Albania Dam Safety	Parent Project ID (if any) P110481
Parent Project Name Energy Community of South East Europe APL Program - APL 5 for Albania DAM SAFETY	Region EUROPE AND CENTRAL ASIA	Estimated Appraisal Date 16-Feb-2018	Estimated Board Date 25-Apr-2018
Practice Area (Lead) Energy & Extractives	Financing Instrument Investment Project Financing	Borrower(s) Albania	Implementing Agency Albanian Power Corporation (KESH)

Proposed Development Objective(s) Parent

The development objectives of the project are to: (i) contribute to safeguarding the major hydroelectric dams of Albania; and (ii) improve their operational efficiency and enhance the stability of power supply for the regional electricity market. The proposed project supports the development of the Energy Community in accordance with the objectives of the Energy Community of South Eastern Europe (ECSEE) APL.

The key objectives of the ECSEE Program are to: (a) Create a stable regulatory and market framework to attract investment in gas networks and power systems so that all states in the region have access to the stable and continuous energy supply, essential for economic development and social stability; (b) Establish integrated regional markets in South East Europe, closely linked to the internal energy market of the European Union, and complying with the rules applicable within the European Union; (c) Enhance the energy security of South East Europe and the European Union by providing incentives to connect the Balkans to Caspian and North African gas reserves; and (d) Improve the environmental situation in relation to energy in the region.

Components

- Physical infrastructure investments
- Technical Assistance and Training

Financing (in US\$, millions)



**SUMMARY**

<b>Total Project Cost</b>	14.20
<b>Total Financing</b>	14.20
<b>Financing Gap</b>	0.00

**DETAILS**

<b>Total World Bank Group Financing</b>	14.20
World Bank Lending	14.20

Environmental Assessment Category

Partial Assessment (B)

Decision

The review did authorize the preparation to continue

**B. Introduction and Context**

Country Context

1. Albania’s internal electricity generation capacity of about MW 2,100 is entirely dependent on hydropower. There are three power plants in the Drin River cascade: Fierza, Komani and Vau Dejes with total installed capacity 1350 MW, generating about 70 percent of total supply. In an average hydrological year, the Drin Cascade generates about 4 billion kilowatt hours of hydroelectricity. At recent market prices of electricity in the region, this represents an annual value of more than US\$240 million, and the asset value of these hydro plants could well be about US\$2.4 billion.

Sectoral and Institutional Context

2. The Drin Cascade, plays an important role in the country’s objectives to increase regional power connectivity and create a Regional Power Market in South Eastern Europe. This role will become more significant as: i) the Montenegro-Italy undersea transmission line starts operations in 2020, thus enabling Albania, and KESH in particular to take advantage of price differentials in the region, ii) the Trans-Adriatic Pipeline (TAP) becomes operational in 2020 and Albania’s power sector subsequently complements its hydro-based system with thermal generation, thus hedging weather volatility and better managing the Drin Cascade, and iii) the Albanian Power exchange, and balancing market, become operational in 2019, which would lead to a market pricing system—and associated revenue streams—that would enable Komani’s Hydro Power Plant (HPP) to provide reliable secondary regulation to neighboring countries such

as Kosovo, ancillary services, and peak capacity in the regional market. Thus, safe and reliable operation of the HPPs on the Drin Cascade is not only a safety concern, but also a potential revenue management source for the Government in the future.

3. In this context, the Dam Safety Project aims at improving the safety of dams and their performance and availability, extending their project life time, and increasing their compliance with environmental and safeguards best practices. The project is also linked to the Bank's overall energy sector support for Albania, which focuses on increasing regional power connectivity and the creation of a regional power market in South Eastern Europe.

## C. Proposed Changes

### Summary of Changes

4. The proposed amount of additional financing is EURO 12 million (US\$14.2 million equivalent). The restructuring and additional financing comprise modification to the results framework (RF), an extension of the closing date, cancelation of the activities under two sub-components, components' costs, and reallocation. The Project Development Objectives will remain the same as in the Original Project.

### Change in Results Framework

5. The RF will be updated. The two PDO indicators, "*Electricity output due to reduced water leakages and electro-mechanical equipment rehabilitation*", and "*Electricity output due to improved reservoir optimization procedures*" will be merged to one PDO indicator, "*Improve the dams' operation efficiency*". The indicator tracks one of the objectives, which is to improve the overall operational efficiency of the power plants. This PDO indicator is measured by the following criteria: (i) increase the availability of generation units (rehabilitation and maintenance), (ii) eliminate the water leakages at the generation units, spillway tunnels and other hydro power plant facilities, and (iii) establish, adopt and use the customized criterion to operate the power plants and/or hydro cascades in optimal manner based on the operation objective. The PDO indicator, "total safeguarded dams and generation capacity" is changed to "safeguarded dams and generation capacities" and its baseline and end target value will be expressed by text of tracking by percentage.

6. A new citizen engagement intermediate indicator, "*percentage of grievance received and addressed within agreed timeframe*" will be added since the project has established a GRM. It will monitor the progress on how the project related complaints and feedback from all citizens are addressed (detailed information of the project GRM is shown under E. Social).

### Change in Components and Costs

7. No additional activities are proposed. The project components remain the same as originally itemized. The Physical Infrastructure Investment component remains the same but the costs have significantly increased compared with the original project. EBRD is co-financing the Komani spillways rehabilitation works (EUR6.1 million), and IBRD will additionally finance Euro 1.6 million for it, and KfW is providing parallel financing for the Vau-Dejes spillways rehabilitation (KfW financing EUR15 million). The

Bank will keep the financing the contracts for Komani E&M rehabilitation works and for Fierza HPP spillways and stoplogs rehabilitation works.

8. The technical assistance component remains the same except for one activity which is proposed to be dropped (the TA for Detailed Study and procurement assistance for construction of Skavica HPP on the Drin River upstream and the study is being undertaken by EBRD). No significant cost increase is expected for these activities.

#### **Change in Loan Closing Date**

9. Given the delays during the election year in 2017, which affected delivery of this additional financing, a one-year extension of the project's closing date from June 30, 2019 to June 30, 2020 is being requested.

#### **Cancelation of Activities Proposed**

10. The cancelation of two sub-components included in the original project:

- the spillway gates rehabilitation and construction of new stoplog in Vau Dejes HPP, which will be parallelly financed by KfW through an already approved EUR15 million loan, and
- the TA for detailed study and procurement assistance for construction of Skavica HPP on the Drin River upstream. This study is being undertaken by EBRD under a EUR1.5 million WBIF grant.

#### **Reallocation between Disbursement Categories**

11. Categories will be updated to reflect the remaining works and simplify reallocation among TA components. The three categories are: Category 1 - goods, works and consulting services for the rehabilitation of the Fierza hydro power plant spillway gates and stoplogs, and TA; and Category 2 - Goods and works for the rehabilitation of the Komani hydro power plant spillway gates and stoplogs, which will be co-financed with EBRD. Category 3 covers front-end fee. Due to the cancellation of the TA for Detailed Study and procurement assistance for construction of Skavica HPP on the Drin River upstream, remaining funds under Category 3 will be reallocated to cover the owner's engineer contract under the proposed Category 1. The amount is about SDR 200,000.

#### **Change in Implementation Schedule**

12. Works on Electromechanical Rehabilitation (E&M) of the four units at Komani HPP are on track. Two of the units (UNIT#2 and UNIT#3) have since been commissioned and the third unit (UNIT#1) was recommissioned in January 2018. The last unit (UNIT#4) was dismantled for rehabilitation in February 2018 and its commissioning is planned for October 2018.

13. Fierza HPP and Komani HPP spillway gates and stoplogs contract will be implemented in 18-24 months. If the contract is effective by May 2018, the completion is expected in May 2020. Thus, an extension of the project closing date from June 30, 2019 to June 30, 2020 is required.

#### D. Description of Additional Financing

14. The proposed additional financing will provide financial support for the completion of: (i) rehabilitation of the spillways in two dams of the Drin River Cascade (Fierza and Komani HPPs), and (ii) E&M rehabilitation of in the Komani HPP. On the former, the proposed additional financing is based on the results of the announced bid and contract award to a responsive bidder. The TA component will cover ongoing tasks such as owner’s engineer contract, panel of experts and implementation of an updated financial management system at KESH.

15. The table below lists the parent’s project original budget in euro equivalent, the estimated cost at the time of the 1<sup>st</sup> additional financing, funds available to complete the works today and expected final cost—including contingencies—and the financing plan for the 2<sup>nd</sup> additional financing, including EBRD co-financing and KfW’s parallel financing.

**Table 1: Financing Plan for Remaining Components (EUR million)**

Components	Original Cost	AF1 Cost	Funds Available	Expected Final Cost	World Bank AF2	EBRD Co-Financing	KfW Parallel Financing
Komani E&M Rehabilitation	7.80	20.22**	32.85	35.47	2.62	0.0	0.0
Komani Spillways Rehabilitation	3.00	3.42	0.0	7.70	1.60	6.10	0.0
Fierza Spillways Rehabilitation	3.00	3.22	0.0	7.30	7.30	0.0	0.0
Vau-Dejes Spillways and Stoplog rehabilitation	1.80	4.00	0.0	15.0	0.0	0.0	15.0
TAs (Project Implementation; Panel Experts, Financial Management and Others)	7.10	7.37	8.43	8.88	0.45	0.0	0.0
<b>Total</b>	<b>22.70</b>	<b>38.22</b>	<b>41.28</b>	<b>74.35</b>	<b>12.00</b>	<b>6.10</b>	<b>15.0</b>

\*\* Bid price euro 25.6 million

#### E. Implementation Arrangement

16. Institutional arrangements will remain the same. Management of the implementation of the project would be carried out by KESH since it has a well-functioning and experienced PMU. Implementation consultants under the project have helped the PMU prepare the bidding documents and monitor implementation with the Bank’s policies for procurement of goods and services.

#### F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The project activities will be located on, or inside, the facilities of the hydropower dams in the Drin and Mat Rivers. The project is not expected to cause any changes in the water management beyond the normal



operational characteristics of the dams. All civil works financed under the project are limited to areas on the dams owned by KESH, therefore none of these activities require land acquisition. The locations of the dams and the project works are not associated with any of the some times illegal and uncontrolled construction activities that sometimes take place elsewhere in Albania.

**G. Environmental and Social Safeguards Specialists on the Team**

Bekim Imeri, Social Safeguards Specialist  
Esma Kreso Beslagic, Environmental Safeguards Specialist

**SAFEGUARD POLICIES THAT MIGHT APPLY**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The works under this AF will include electromechanical rehabilitation of the Komani HPP and the Fierza and Komani HPP spillway gates and stoplogs rehabilitation along with the Vau-Dejes spillway gates rehabilitation and construction of a new stoplog. The environmental concerns associated with these works include the dust and noise, potential pollution to the water, and waste management, including potential hazardous materials that need replacement (asbestos). These impacts have been identified and proper mitigation measures have been proposed in the EIAs that have been prepared for all three dams with disclosure and public consultations in May 2008 and which have been mandatory for all works that have been conducted so far. The provisions of the EIA continue to be relevant for the works under the AF and will be integrated into the bidding and contractual documents as such. There are no outstanding studies or reports that need to be prepared for this AF.
Natural Habitats OP/BP 4.04	No	There are no direct works on natural habitats, nor are there any critical habitats in the immediate



		vicinity or areas that could be impacted by the project.
Forests OP/BP 4.36	No	There are no activities supported in forested areas or that could have an impact on forested areas.
Pest Management OP 4.09	No	No pest management activities are foreseen.
Physical Cultural Resources OP/BP 4.11	No	There are no identified physical or cultural resources within the area of the project implementation.
Indigenous Peoples OP/BP 4.10	No	N/A
Involuntary Resettlement OP/BP 4.12	No	The works will be conducted on existing structures owned and operated by KESH and there will be no resettlement under the financed activities. Also, there will be no changes to the storage areas and reservoirs that might require resettlement.
Safety of Dams OP/BP 4.37	Yes	The overall purpose of the project is to improve the dam safety of the dams in the cascade. As such, following the initial review of the Panel of Experts, the project has retained them on board for the duration of the project. In addition to that, all of the required plans and trainings have been included in the parent project and have been the main issue of the overall project.
Projects on International Waterways OP/BP 7.50	Yes	The Drin river system represents the largest watershed in Albania, that feeds from water bodies from Kosovo, Serbia and FYR Macedonia, and discharges into the Shkodra/Skadar lake. As such, the Drin river classifies as a large tributary to an international waterway and this policy is triggered. Since the project will not finance activities that could lead to a change in the water quality or quantity to the downstream users, as well as the international waterways and their tributaries, an Exception to Notification memo was approved by the RVP for the original project. Although there are no changes to the project activities supported under the AF as compared to the original project, the team has prepared a new memo, dated 02/22/2018 of the same content for the processing of this AF.
Projects in Disputed Areas OP/BP 7.60	No	N/A



## KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The parent project is rated as a Category B triggering OP 4.01 on Environmental Assessment, OP 4.37 Safety of Dams and OP 7.50 on International Waterways. The Additional Financing does not envisage any new activities or physical interventions beyond those that have been identified within the parent project, and for which three EIA studies have been completed, for HPPs Fierza, Komani and Vau Dejes. The EIAs have been subject to public consultations and disclosed in May 2008. An RVP exception to notification was also prepared and finalized during the preparation of the original project. No environmental issues have been noted during site visits to ongoing Rehabilitations works at Komani HPP site.

The overall environmental impact is assessed as positive, since safeguarding the operation of the dam and preventing dam failure helps contribute to a better hydrological analysis and monitoring and improved water management including decreasing the risk of flooding the surrounding areas. Application of mitigation measures included in the EIAs will continue to mitigate the environmental impacts associated with the physical works being carried out.

There are not additional Technical Assistance studies to be provided under water resources management or for potential new hydropower development.

The project's physical infrastructure investments are of limited scope and will not change the existing levels of the dams. Potential environmental impacts concern mainly the stringent control over the execution of works and management and disposal of limited waste during rehabilitation works. Changes in reservoir levels during plant shutdowns for rehabilitation works would be within normal operating levels. As a result of staying within normal operating levels, there will be no release of water in amounts that would require displacement of any people or structures.

All civil works financed under the project are limited to areas on the dams owned by KESH, therefore none of these activities require land acquisition. The locations of the dams and the project works are not associated with any of the some times illegal and uncontrolled construction activities that sometimes take place elsewhere in Albania. The project team has ascertained that there are no structures (residential or commercial, legal or illegal) which would need to be removed for purposes of the project.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:  
There are no expected potential indirect and/or long term impacts due to anticipated future activities in the project area of dam safety investments.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.  
There are no relevant project alternatives as the main project activities are related with enhancing the safety of the hydropower dams.



4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The borrower has prepared three separate Environmental Impact Assessment reports including EMPs specifying how the impacts during works will be managed. The PMU has appointed a staff member responsible for overseeing the implementation of safeguards policies. In addition to the World Bank due diligence, KESH has very stringent in house policies on works being executed on the dams, and these are strictly followed, and also have full time environmental specialists within their own staff.

The requirements and mitigation measures set forth in the EIAs and accompanying EMPs have been integrated into the bidding documents for works as well as contracts. All mitigation measures are being reported on in regular supervision reports and are subject to site and on-the-spot checks by KESH specialists as well as the World Bank team. The mitigation measures are, for the most part, very complementary to the operating procedures in place for all of the dams, which are very stringent, in particular for overhauls of sections of the HPP while the dam is operational.

The project includes a number of capacity building activities that are provided as "on the job" trainings in particular for dam safety. These include the Potential Failure Mode Assessment (PFMA) Workshop developed by the US-FERC (Federal Energy Regulatory Commission). The method is described in chapter 14 of the FERC Dam Safety Guidelines. PFMA is aimed at identifying issues, and adopting measures to counteract them, following a process which involves dam operators. In addition to providing an effective way for the identification of needed safety measures, the PFMA approach represents a powerful training instrument which is designed to address the staff directly involved with day to day surveillance, and O&M of the dams. The implementation consultants scope of work include the organization and execution of the PFMA workshops which will be required to propose appropriate adaptation of the PFMA method to the case of Albania. PFMA workshops will be held at the 5 dam sites of Fierze, Koman and Vau Dejes for Drin River and Ulza and Shkopeti for the Mat River.

One of the outputs of the process should be matrixes describing, in quantitative terms, the appropriate Response Level in case of Emergency situation. Preparation of such matrixes is highly recommended for all those dams which have an Emergency Preparedness Plan (EPP). The emergency response level matrix is a way of translating the somehow complex content of the EPP into clear and precise instructions for the operators. That is essential in emergency conditions.

Training is also part of the packages to be procured under SECO grant, which shall encompass from the calibration and testing to instrument operation and maintenance of sensor and devices of dam monitoring, geological, seismic and geodetic monitoring.

On site training consisting of basic theory and intensive hands-on course will be performed.

The PMU has also conducted study tours to increase their knowledge and facilitate experience sharing.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The hydropower dams of the project are located in generally remote and isolated areas of Albania, which are sparsely populated. The community of Ulza on the Mat River is by the Ulza lake created by the dam, while the communities of Vau Dejes and Fierza are near the dams with the same names on the Drin River. In Komani there is a small number of

persons living near the dam. KESh disclosed on May 15, 2008 the environmental documents prepared in the above mentioned communities. The public consultations on the disclosed Environmental Impact Assessment for the Rehabilitation works were held on May 26 2008 in Ulza; on May 27, 2008, in Vau Dejes; on May 29, 2008, in Komani; and on May 30, 2008, in Fierza.

For the purposes of Additional Financing, the EIAs will be re-disclosed both in country and through the World Bank's external website.

**B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)**

**Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
21-Apr-2008	24-Apr-2008	

**"In country" Disclosure**

**If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)**

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?

Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?

Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?

Yes

**OP/BP 4.37 - Safety of Dams**



Have dam safety plans been prepared?

Yes

Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?

Yes

Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?

Yes

#### **OP 7.50 - Projects on International Waterways**

Have the other riparians been notified of the project?

No

If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?

Yes

Has the RVP approved such an exception?

Yes

#### **The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank for disclosure?

Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?

Yes

#### **All Safeguard Policies**

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?

Yes

Have costs related to safeguard policy measures been included in the project cost?

Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?

Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?

Yes



## The World Bank

Additional Financing to Energy Community of South East Europe APL Program APL 5 for Albania Dam Safety (P166469)

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### APPROVAL

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