PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: AB3845

Project Name	Energy Community of South East Europe APL Program - APL 5 for Albania DAM SAFETY
Region	EUROPE AND CENTRAL ASIA
Sector	Power (50%);Renewable energy (50%)
Project ID	P110481
Borrower(s)	REPUBLIC OF ALBANIA
	Republic of Albania Albania
Implementing Agency	
	KESH Blloku Albania Tel: 355 42 62055 Fax: 355 42 32024 hoxhaf@KESH.com.al
Environment Category	[ ] A [X] B [ ] C [ ] FI [ ] TBD (to be determined)
Date PID Prepared	April 21, 2008
Date of Appraisal Authorization	April 28, 2008
Date of Board Approval	June 20, 2008

1. Country and Sector Background

1. *Overall ECSEE APL Program.* The improvement of the performance of the energy sector is crucial to sustain economic development in South East Europe (SEE). The power supply situation has tightened significantly since 2006, as shown by a near doubling of prices for electricity traded in SEE. Electricity supply constraints threaten to constrain economic activity and quality of life if not addressed with determined regional action. Apart from Turkey, investment over the past 10-15 years has been limited, with the average age of generation capacity now in excess of thirty years. Significant capacity additions (in the order of 12,000-15,000 MW) and plant rehabilitations (in the order of 8,000-9,000 MW) will be required over the period to 2020, along with matching transmission and distribution system investments, if demand is to be met and severe power shortages are to be avoided.[1]

2. The SEE countries have acknowledged that solutions to these regional issues based on isolated national markets are neither desirable nor feasible as a means to attempt to close investment gaps and emerging demand and supply imbalances. Building upon their desire to cooperate in the power sector, in recognition of potential gains from increased trade, and as part of a wider movement to strengthen regional cooperation, the Governments of the SEE countries and the European Commission signed the "Athens Memorandum" – the Memorandum of Understanding on the Regional Energy Market in South East Europe and its Integration into the

[1] Generation Investment Study for South East Europe (2004), a joint project of the Bank and the European Commission. The study was updated by the World Bank in January 2007.

European Community Internal Energy Market - on December 8, 2003 in Athens, Greece. This Memorandum (followed by a Treaty, see below) formally expressed their commitment to what was initially called the Energy Community of South East Europe (ECSEE), but was subsequently shortened to the Energy Community.

3. *The Treaty establishing the Energy Community (the Treaty).* The Council of the European Union authorized the European Commission in June 2004 to open negotiations on behalf of the European Union, with SEE countries. The Energy Community's Ministerial Council concluded on December 13, 2004 that there was broad agreement on the substance of the Treaty and directed their negotiators to conclude the remaining details as soon as possible. The Treaty was consequently signed on October 23, 2005 by all of the Energy Community's Regional Members (with the exception of Turkey) and the European Community. The Treaty entered into force on July 1, 2006.

4. **Current** membership of the Energy Community is as follows: (i) *State Parties* are Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslavian Republic of Macedonia, Serbia, Montenegro; (ii) The United Nations Interim Administration Mission in Kosovo, administering Kosovo pursuant to the United Nations Security Council Resolution 1244, is an *Adhering Party*; (iii)The State Parties and the Adhering Party together are *Regional Members* (also referred to as the *Contracting Parties*); (iv) EU Member States Austria, Bulgaria, Cyprus, Czech Republic, Germany, Greece, Hungary, Italy, Romania and Slovenia are *Participants* -any other EU Member States can also request to become a participant; and (v) neighboring Non-EU Member States can request to participate as *Observers*. Currently, Moldova, Turkey, Norway, Ukraine and Georgia are participating as observers.

5. **Albania Power Sector** (See also Annex 1). At the beginning of Albania's economic transition in the early 1990s, the country was virtually 100% electrified and was a net electricity exporter to the region. Electricity demand within Albania fell initially to 79% of the 1989 level by 1992 because of declines in industrial production. Thereafter it rose on average by 10% per year to 2000.By 1998, Albania had become a net electricity importer. From the second half of 2000, the need for imports increased greatly as a result of a fall in hydropower production caused by reduced rainfall. The country was unable to get all the imported electricity it needed because of transmission and financial constraints. The result was large load shedding, which had serious adverse macroeconomic effects. The fall in hydropower production between 2000 and 2002, and in 2007 had a direct and significant adverse impact on national economic output, and the load shedding caused cuts in production by industry and obliged other businesses to purchase and use costly back-up diesel generators. Households had to suffer without electricity for many hours of each day.

6. The Albanian Power Corporation (KESH) was unable to pay for more than a small proportion of the imports needed out of its own resources because of financial difficulties caused by widespread illegal use of electricity, poor payment of bills and retail prices which were below the cost of imported electricity. Faced with these difficulties, the Government started providing a subsidy in 2000, but its large level (US$31.5 million) in 2001 diverted funds from other critical needs including poverty reduction measures. KESH also began implementation at the start of 2001of a rolling multi-year Power Sector Action Plan to tackle the critical issues of the sector, with detailed quarterly and annual targets for key variables such as network losses and bill collection. It managed to reduce transmission and distribution losses from 44.8% of transmission in 2001 to 39.7% in 2004. It also improved collections from 76.3% of the amount

billed in 2001 to 88.9% in 2003, with a fall to 83.8% in 2004, largely through reductions in receivables from Government budgetary and non-budgetary entities. In addition, the Electricity Regulatory Authority (ERE) raised the average tariff from Lek 4.41/kWh (excluding VAT) in 2001 to Lek 6.70/kWh in 2004. As a result of these measures, collected revenue increased from Lek 12.50 billion (including VAT) in 2001 to Lek 23.84 billion in 2004. These improvements and greatly improved hydrology after 2002 enabled KESH to achieve satisfactory financial performance and allowed the import subsidy to be phased out by the end of 2004.

7. Power sector improvements were partly reversed in 2005 and 2006 because of disruption caused by Parliamentary elections, the coming into power of a new Government and the replacement of KESH's management and many distribution employees. Total losses rose to 41.9% in 2006, and the collection rate fell to 81.9%, but the tariff was raised to Lek 7.26/kWh. Collected revenue reached only Lek 24.86 billion in 2006. A turnaround began in March 2007 with the appointment of a new manager in KESH. The new management has been giving high and widely publicized priority to reducing non-technical losses and improving collections. As a result, total losses fell to 36.8% in 2007, the collection rate increased to 89.5%, and KESH's collected revenue for 2007 reached Lek 27.25 billion. Nevertheless, the return of below average hydrology in late 2006 and a simultaneous large increase in electricity import prices created severe cash-flow difficulties for KESH in 2007. The Government provided some relief by paying off outstanding arrears on bills to government budgetary and non-budgetary entities and by providing loans. KESH also obtained large overdraft facilities from Albanian commercial banks to help pay for imported electricity. Despite these contributions from the Government and banks, KESH was obliged to increase load shedding to a record-high 927 GWh. ERE approved a tariff increase of about 15% to a level of Lek 8.23/kWh in February 2008 (Lek 8.04/kWh average for 2008), but KESH has continued to have cash-flow difficulties during the first quarter of 2008.

8. The electricity sector in Albania is undergoing reform. The Law on Regulation of the Electricity Sector, enacted in August 2003, provided for strengthening of ERE, and removed the authority of the Government to fix a price cap. The Transmission System Operator, created from the separation of transmission from KESH, was registered as a joint-stock company on July 14, 2004 with KESH as the holding company. The Transitional Market Model was approved in August 2004. In compliance with the Energy Community treaty, all non-household customers have been granted the right to become eligible consumers and choose their own suppliers. However, all but one customer have chosen to remain as tariff customers in 2008. The strengthening of ERE's independence and the creation of the Transmission System Operator (TSO) enabled Albania to meet the initial conditions of membership in the Energy Community. A second phase of the reform process leading to privatization and further implementation of the market model commenced with the Government's decision in 2006 to privatize power distribution. IFC is providing assistance to the Government towards the goal of selling the power distribution company (Disco) to a strategic investor in 2008. A revised market model, the Albanian Market Model (AMM), has been approved by the Government. The AMM distinguishes between a Wholesale Public Supplier, which would initially be a part of KESH, and a Retail Public Supplier, which is to be privatized with the Disco. The Wholesale Public Supplier is to be responsible for security of supply to all tariff customers. It will sell its electricity to the Retail Public Supplier at a price regulated by ERE.

9. The AMM also stipulates that a power generation company, KESH Gen, is to be separated from KESH and incorporated. Its shares will be held initially by KESH, while options for its future structure and ownership will be examined under the project. KESH Gen will be responsible for the three hydropower plants on the Drin River and the two hydropower plants on the Mat River that would be the beneficiaries of the proposed project. The AMM stipulates that KESH Gen will provide ancillary services to the TSO and offer its remaining electricity to the Wholesale Public Supplier at a regulated tariff. Any electricity not taken by the Wholesale Public Supplier may be sold on the market, but the profits are to be provided to tariff consumers through later adjustments in KESH Gen's regulated tariff. Because of Albania's large power net-import situation, the Wholesale Public Supplier is expected to require all production made available by KESH Gen in the foreseeable future, except possibly in good hydrological years.

2. Objectives

10. The development objectives of the ECSEE APL5 Dam Safety 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 APL.

11. The project's main impact would be to prevent a possible catastrophe resulting from a dam failure. Such a catastrophe could result in significant loss of life and damage to property of persons living in downstream areas. It would also cause a major and prolonged fall in hydropower production that would severely affect the entire population of Albania and would likely significantly increase electricity prices in the whole SEE region. Poor and vulnerable people in the region would likely suffer disproportionately from any such electricity price increases.

12. In addition, the project would assist Albania to maximize its benefits from existing hydropower by improving operational practices of existing facilities and enabling more effective participation in the regional electricity market. The project will also promote private sector investment in hydropower by collecting, organizing, and making available, better data and studies on the country's hydropower potential.

13. The key indicators would be: (i) improvement of the monitoring and alarm systems a the Drin and Mat River dams to meet international standards for dam safety: (ii) increased electricity output due to reduced water leakages and equipment rehabilitation; (iii) reduced power system supply costs (for domestic plus imported electricity) as a result of the use of improved reservoir optimization procedures; (iv) maintenance of system load frequency variations within international norms; (v) preparation by KESH of financial statements in accordance with IFRS that merit unqualified audit reports; (vi) hydropower development studies that lead to competitions for award of concessions for projects judged to be economic; and (vii) unbundling of KESH Gen including incorporation, and transfer of assets, liabilities and personnel.

14. **ECSEE Program** All SEE countries have the prospect of EU membership. "The Thessaloniki Agenda for the Western Balkans: "Moving towards European Integration," which

was endorsed by the European Council in Thessaloniki in June 2003, encourages the region to adopt legally binding energy market agreements as has now been done with electricity.

15. The Energy Community and the Athens Process are integral elements of the strategy developed by the Regional Members and the European Commission for all states in South East Europe to have access to a stable and continuous energy supply. This is regarded as essential for economic development and social stability. The creation of an area without internal frontiers for energy contributes to economic and social progress and a higher level of employment as well as balanced and sustainable development. These higher level objectives are expressed in the Energy Community Treaty which is discussed above.

16. The Stability Pact has made regional energy cooperation one of its core objectives in its efforts to strengthen regional cooperation and to foster the conditions for peace, stability and economic growth in South East Europe. The Stability Pact has characterized the Energy Community as a unique chance for the SEE region to consolidate reconciliation. It also provides a driver towards a more comprehensive economic and political integration into the European Union.

17. The Bank supports regional efforts to promote cooperation and integration in South East Europe. The Energy Community is one of the most prominent of the current regional programs. The ECSEE APL facility is a key component of the Bank's support for the Stability Pact and the working partnership with the European Commission.

3. Rationale for Bank Involvement

18. **ECSEE Program.** The Bank remains heavily involved in the integration of the SEE Energy Market. First, the Bank is participating in regional efforts to promote cooperation and integration in South East Europe and inter alia supports the Stability Pact. Second, the Bank is an active participant in the Athens process, at the request of the European Commission. . Third, the Bank has supported individual countries of South East Europe in their efforts to rehabilitate and restructure their power sectors through policy dialogue, technical assistance and financing since the early 1990s (in some cases even earlier). This deep regional and country knowledge and participation in the development of the Athens process puts the Bank in a strong position to provide regional lending, policy advice and technical assistance to further support the Athens process. The ECSEE APL program was approved by the Board on January 27, 2005. It is a key component of the Bank's support for the Stability Pact and its working partnership with the European Commission.

19. **ECSEE APL5–Dam Safety Project.** Albania's hydropower plants are a precious asset both for the country and the regional electricity system. The two main cascades on the Drin River and the Mat River have an installed capacity of 1.4 GW, produce over 90% of domestic electricity and supply normally more than 65% of the country's total demand. In an average hydrological year, Albania generates about 4.2 GWh of hydroelectricity. At current market prices of electricity in the region, this represents an annual value of more than US$ 450m, while the asset value of these hydro dams could be estimated at well above US$ 3 billion.

20. Building works for Albania's hydropower dams started in the 1950s and the last one was completed in the mid-eighties. However, these major infrastructure facilities have been inadequately monitored and maintained for more than 15 years and there may now be a risk of a

dam failure. Following the World Bank's warning on this issue, a *"Dam Safety Survey for Hydropower Plants Located on the Drin and Mat River Cascades"* was funded by the Swiss Secretariat of Economic Affairs (SECO) and completed in late 2006 (Dam Safety Survey). The report identified serious deficiencies. Both the institutional set-up and the monitoring and physical infrastructure facilities were found in need of significant improvements, while the costs of a dam failure would be huge both economically and in human lives.

21. Support for Albania's hydropower dams is needed not only because of the significant safety risks involved for the country and the need to bring dam safety in Albania to modern international standards, but also to improve the country's overall hydropower operation and benefit the whole regional electricity system. Most important for the regional electricity market is the significant storage capacity of the dams, which can provide considerable benefits for the South East Europe electricity grid. Storage of electricity in hydropower dams can promote economic efficiency in the regional market (complementing existing thermal power plants) and would be necessary to incorporate other new renewable energy generation in the region (such as wind power, which is intermittent by nature and needs electricity storage facilities so that it can be economically and effectively integrated in electricity systems). Preliminary surveys indicate that additional pumped-storage plants may be economical in the Drin Cascade, however more detailed pre-feasibility work will clarify the actual potential and its benefits for the regional electricity system. Addressing the safety risks of the existing dams, and bringing their safety standards to international norms, would create valuable options for Albania and the region regarding the future operation and ownership of these hydroelectric facilities.

22. The Albanian Government recognizes the high importance of hydropower for the country's and the regional electricity system and has a strategic objective of developing the remaining hydropower potential of the country (small and large-scale hydro) under a concession scheme and public-private partnerships. The Bank and the IFC has assisted the government with its Concessions Law (approved in December 2006), and responding to government's requests will finance preliminary development work to assist the government to assess in more detail the risks and costs of new projects[2]. An earlier Bank project for rehabilitation of dams for irrigation will be completed in June 2008 and will provide an assessment of needed investments for agricultural dams. In addition, a series of projects are currently underway to improve the country's regional interconnections, while the Government's strategy is to further expand its transmission connections with neighboring countries.

4. Description

23. **Eligible ECSEE APL Project Components** The Bank's March 2004 framework paper concluded that significant investments in power generation, transmission and distribution and technical assistance are required for a well-functioning power market. Priority investments and technical assistance would be financed under the ECSEE APL program so that the Energy Community's Regional Members can effectively participate in the regional electricity market (Annex 1, Section 2).

[2] KfW has also a project of technical assistance and guarantee-financing to support small-hydropower projects in Albania.

24. **ECSEE APL5-Dam Safety Project** The 2006 Dam Safety Survey recommended a series of investments to improve dam safety and operation and categorized them into: (i) very high priority, high priority and medium priority; and (ii) conditional high priority measures. The project will finance those of the very high priority, high priority and medium priority investments that are the most precisely defined and need relatively little further study. In addition, it will finance several related high-priority investments not covered by the Dam Safety Survey including: rehabilitation of spillway no. 3 at Koman; rehabilitation of electromechanical equipment at Koman; and implementation of a load frequency control system at Vau i Dejes and Fierza. The project will strengthen the institutional capacity of KESH to improve its water management practices and optimize the use of its hydropower assets. In addition it will include technical assistance: for hydrology analysis and water management; studies for new hydropower development; and financial management capacity building.

25. Some of the very high, high and medium priority investments need additional time and financing to be better defined, so they will be studied further during project implementation. EBRD and SECO have agreed, in principle, to provide financing for additional safety investments of up to Euro 30m. The conditional high priority investments, which might involve the construction of additional new spillways require considerable additional analytical work and would be covered under possible future projects if proven to be necessary.

26. The detailed feasibility study of these interventions has started (financed by SECO) and serves as the basis for the preparation of the project. An already approved PHRD grant was used for the preparation of the social and environmental assessment of the project investments. The need and alternative approaches for the higher cost category (see ii above, conditional priority) investments will be assessed during project implementation.

27. The project consists of two main components: (1) physical infrastructure investments; and (2) technical assistance.

28. **Component 1: Physical Infrastructure Investments**

These items include:
(a) Remedial Measures of Very High Priority: *(i) Dam Safety Alarm Systems for Drin and Mat River Basins* include the specification and implementation of water alarm systems in the Drin and Mat River basins, and specification of an Emergency Action Plan; *(ii) Dam Monitoring Systems for Drin and Mat River Basins* include the specification and implementation of dam monitoring equipment including GPS, and implementation of a data acquisition system.
(b) Remedial Measures of High Priority: *(i) Fierze Dam* - Rehabilitation of spillway no. 3; *(ii) Fierze and Komani Geological Monitoring System*- included the specification and implementation of movement/landslide alarm systems linked to GPS for identified potential geological slip zones; *(iii) Vau I Dejes* - Spillway rehabilitations and maintenance; *(iv) KESH Dam Safety Department*- equipment for data archives, monitoring and documentation.
(c) Remedial Measures of Medium Priority and Operational Improvements: *(i) Komani Dam* - General rehabilitation of spillways 3 and 4 --gate seals, stop-logs, as well as frames, cylinders and hydraulic power, and modification of outlet for spillway no. 4.; *(ii) Komani Dam* - rehabilitation of electromechanical equipment; *(iii) Vau i Dejes and Fierza Dams* - Implementation of Load Frequency Control system to allow for the integration of Albania's electricity system with UCTE.

29. **Component 2: Technical Assistance and Training**

(a) Hydrology Analysis and Water Management. The project will provide technical assistance to develop and train KESH on an integrated water resources management approach for the management of the Drin and Mat river basins and the optimization of power dispatching and water resource management. Because of the lack of maintenance and institutional weakening in Albania water management practices have been neglected and significant gaps created. The technical assistance is designed to: (i) improve the quality and availability of hydrological data, analysis and modeling; (ii) study the possibility of changes to operating rules to provide increased economic, environmental and social benefits, and (iii) incorporate implications of climate change in terms of hydrological profiles. Some of this analytical work has started during project preparation, with support from SECO. This work will continue during project implementation.

(b) Project Implementation Consultants. The project will require specialized consultants during its implementation to assist KESH with to assist with procurement, design, and supervision of various contracts.

(c) Institutional Strengthening. The development of a Safety of Dams culture within KESH and the institutional strengthening of the Albanian Commission of Large Dams (AlbCOLD) is a requirement for the sustainability and long-term implementation of safety measures. Technical assistance will be provided to strengthen the capacities of KESH's dam safety department and AlbCOLD.

(d) Studies for new hydropower development. Albania has considerable undeveloped hydropower potential that when developed would provide additional capacity to the country and the regional electricity system. Around the Drin river area there seems to be potential for further development, or pumped-storage options. To address the initial upstream costs of feasibility studies this technical assistance component will finance detailed feasibility studies for new hydropower development in Albania.

(e) Financial management capacity building for KESH. KESH, in compliance with the Energy Community Treaty is undergoing further unbundling. The Transmission System Operator (TSO) became a separate entity in 2006, while a Distribution System Operator (DSO) company was instituted legally in 2007. The TSO is currently fully owned by KESH, while the DSO is in the process of privatization. These changes have created a need for better financial reporting under International Financial Reporting Standards (IFRS) to improve sector monitoring and regulation. However, there is limited capacity in KESH to monitor its financial transactions and prepare adequate financial statements. This component will address these shortcomings.

(f) Safety of Dams experts panel. An independent panel of experts is required to oversee the design and implementation of various interventions in the project dams as per Safety of Dams safeguards policy. This component will finance the work of the independent experts.

30. A detailed description of the project is presented in Annex 4. Some of the EBRD-financed investments are not sufficiently well defined yet to be included in the project description and project cost table. However, since they are a priority for the safety of the dams on the Drin and Mat Rivers and EBRD has indicated willingness to finance them, they are linked to the project in the Development Credit Agreement.

5. Financing

Source: ($m.)

BORROWER/RECIPIENT		8.7
International Development Association (IDA)		35.75
SWITZERLAND: State Secretariat for Economic Affairs (SECO)		7.36
	Total	51.81

6. Implementation

31. **ECSEE APL Program** First and foremost, the Energy Community is a partnership among the SEE countries. They have acknowledged that solutions to pressing regional issues based on isolated national markets are neither capable nor desirable as a means to attempt to close investment gaps and emerging demand and supply imbalances. Second, the Energy Community is a partnership between the SEE countries and the European Union with both the countries and the EU signing the Treaty. Finally, the Energy Community is a partnership between the SEE countries, the donors, and financial institutions including the Bank. Financial institutions and bilateral donors include the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the German Development Bank (KfW), the United States Agency for International Development (USAID), the Canadian International Development Agency (CIDA), and France, Greece, Italy, and Switzerland.

32. **ECSEE APL5-Dam Safety Project** Parallel financing of up to Euro 30 million has been agreed, in principle, by SECO and EBRD. IDA would have the right to resort to its remedies if the parallel financing is not approved by December 2009.

33. **ECSEE APL Program** A comprehensive coordination and implementation mechanism has been established for the development of the Energy Community. The mechanism covers and brings together political and administrative leadership, regulators, transmission system operators and other utilities, the European Commission, international financial institutions and bilateral donors in the Energy Community's Ministerial Council, Permanent High-level Group, Task Forces, and the Forum. This mechanism is detailed in Annex 1, Section 1.

34. **ECSEE APL5-Dam Safety Project** Albania's power sector institutional strengthening and reform measures are based on: (i) a rolling multi-year Power Sector Action Plan focusing on measures to strengthen KESH's performance, which was first adopted by the Government and KESH in January 2001, with full support from the donor community, and updated in each subsequent year; (ii) the Law on Regulation of the Electricity Sector enacted in August 2003, which has served as the basis for strengthening ERE; (iii) the Energy Strategy adopted by the Government in June 2003, with a draft updated Strategy completed in mid-2007; (iv) the Albania Market Model approved by the Government in March 2007 and amended in preparation for privatization of the Distribution Company; and (v) Albania's commitments under the Energy Treaty (2005), which envisages sector restructuring based on the provisions of the EC Directives 2003/54/EC. Details of the reforms undertaken and recent performance of the power sector are given in Annex 1, Section 3.

35. Of the total project cost of US$ 56.8 million equivalent the IDA credit would finance of US$ 34 million equivalent. Co-financing of US$ 5 million equivalent would be provided by KESH. Parallel financing of up to US$ 41 equivalent would be provided by SECO and the EBRD for some components to be defined later.

36. The IDA credit would be lent to Albania for 20 years with a 10-year grace period and at the standard IDA service charge. The credit would be re-lent to KESH on the same terms since dam safety is critically important for Albania quite apart from its importance for power generation. KESH would re-lend the credit to KESH Gen.

37. The proposed project would be implemented between September 2008 and September 2013, with a closing date of December 31, 2013. Management of the implementation of the project would be carried out by KESH, with the Project Management Unit (PMU) responsible for implementation of the Power Sector Generation and Restructuring Project and the ECSEE APL2-Albania project continuing for the proposed project. Implementation Consultants under the project would help the PMU prepare the bidding documents and monitor implementation with the Bank's policies for procurement of goods and services and selection of consultants.

7. Sustainability

38. **ECSEE APL Program**. The Energy Community market vision and sustainability are discussed in Annex 1, in terms of ECSEE market participants, market sophistication, competition and integration with the European Union internal energy market. It is important to note that though additional transmission links are required and will be developed, South East Europe (except Turkey) was synchronously interconnected with the main European power system on October 10, 2004. Turkey is also expected to be interconnected with UCTE in the near future. Through integration, the region secures access to a major trading partner and an important import source to meet possible electricity shortfalls and emergency support. This highlights the electricity/economy dimension in the Energy Community's integration into the European Union internal energy market.

39. **ECSEE APL5-Dam Safety Project** Sustainability of the project's investments and implementation of the technical assistance will depend on the successful implementation, subsequent maintenance, and continuation of the associated organizational measures to maintain dam safety, improve water management and strengthen KESH institutionally. Albania's commitments to the Energy Community, the significant value of the dams for the country's supply, and Albania's interest in eventually joining the EU provide a strong incentive to continue with the reform process.

8. Lessons Learned from Past Operations in the Country/Sector

40. **ECSEE APL Program** A key lesson learned from other markets, including NordPool, and from the association of European Transmission System Operators (ETSO) is that the progressive integration of energy markets in SEE and the implementation of common security of supply policies requires that close attention be paid to the design and operation of subsidiary electricity markets (e.g. balancing and ancillary services) which are best administered by Transmission System Operators (TSOs). The Energy Community's implementation organization therefore includes the SEE Transmission System Operators Task Force, which interacts with ETSO and UCTE to ensure smooth integration and coordination. The role of the Energy Community Task Force of TSOs is critical in all phases of the Energy Community's development and operation.

41. Political commitment and adequate financial support are key ingredients of successful reform programs. The Energy Community's development is premised on the political commitment of the SEE countries and is backed by an exceptionally strong donor involvement.

42. **ECSEE APL5-Dam Safety Project.** A capable project management unit is needed for efficient procurement and implementation of the investments and technical assistance. The project management unit (PMU) within KESH that has handled the previous IDA financed power projects satisfactorily would continue for the proposed project through to the closing date, even though KESH Gen may become a separate company, but continuing under KESH ownership.

43. The implementation of the sub-component to rehabilitate the electromechanical equipment at Koman will benefit greatly from the experience of rehabilitating the corresponding equipment at the other hydropower plants on the Drin River under the Drin Cascade Rehabilitation Project (See Annex 2). Koman was not included in that project since it was too new when the project was approved in 1994 and did not require rehabilitation.

44. Earlier efforts by KESH to introduce a new financial management system with IDA financing were not successful. However, KESH realizes the importance of making a new effort. A new system will be needed to enable KESH, the TSO and KESH Gen to meet the data requirements of ERE and participate in the regional market.

45. The project design takes full account of past weaknesses by KESH in monitoring and maintaining the dams and managing reservoir operations through the provision of technical assistance, institutional strengthening measures, and ensuring that KESH will have sufficient financial resources to carry out future maintenance and monitoring. Establishment of new reservoir optimization procedures in the context of the Albanian Market Model will require close coordination between KESH Gen, the wholesale public supplier (part of KESH initially), the retail public supplier (linked to the Disco) and the TSO. To the extent that reservoir operation can be optimized jointly with decisions regarding procurement of imported electricity for peak and off-peak periods for tariff customers and advantage taken of exchanges of Albanian hydropower in peak periods for far larger quantities of power from other countries in off-peak periods the benefits could be enormous, in particular because Albania's system is severely energy constrained.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[X]
Physical Cultural Resources (OP/BP 4.11)	[ ]	[X]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[X]
Indigenous Peoples (OP/BP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[X]	[ ]

Projects in Disputed Areas (OP/BP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP 7.50)	[X]	[ ]

10. List of Factual Technical Documents

ECSEE

Energy Community information is available online at:

http://www.seerecon.org/infrastructure/sectors/energy/index.html

ECSEE Treaty

Athens Memorandum, December 8, 2003

Athens Memorandum, November 15, 2002

Generation Investment Study for South Eastern Europe (2004)

Update of Generation Investment Study (2007)

ECSEE APL5-Albania Dam Safety

Dam Safety Survey for Hydropower Plants located on Drin and Mat River Cascades. Final Report September 2006. Electrowatt-Ekono (Jaakko Poyry Group) and CSD Environment and Geotechnics

Report on the State of Large Dams to the Council of Ministers 2003. Albanian Commission of Large Dams

Feasibility Study for Dam Safety Investments at the Drin and Mat River Cascades. Inception Report February 2008. Poyry Energy

Prefeasibility Study for Rehabilitation of Electromechanical Equipment of Koman Dam (KESH 2008).

11. Contact point
Contact: Demetrios Papathanasiou
Title: Senior Energy Economist
Tel: +355 4 2280 663
Fax: +355 4 2240 590

* *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*

Email: dpapathanasiou@worldbank.org

12. For more information contact:

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Email: pic@worldbank.org
Web: http://www.worldbank.org/infoshop