



## **Environmental and Social Review Summary**

### **AES Sonel**

*This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed prior to the date on which MIGA's Board of Directors considers the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA's activities. This document should not be construed as presuming the outcome of the decision by MIGA's Board of Directors. Board dates are estimates only.*

*Any documentation that is attached to this ESRS has been prepared by the project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.*

Country:	Cameroon
Sector:	Energy and Extractives
Project Enterprise:	AES Sonel
Environmental Category:	B
Date ESRS Disclosed:	February 20, 2014
Status:	Due Diligence

#### **A. Project Description**

Actis plans to acquire the assets of AES Corporation ("AES") in Cameroon. The Project comprises the acquisition of and further investment into AES Sonel in Cameroon. AES Sonel ("the Project" or "the Company") is currently owned 56% by AES and 44% by Republic of Cameroon ("RoC"). AES Sonel holds a generation concession which covers up to 1,000 MW. There is currently about 933 MW of existing generation, which is mostly hydropower, as well as the electricity transmission and distribution concessions for the entire country of Cameroon servicing about 800,000 customers.

The 933 MW generation capacity is comprised of three grid-connected hydropower plants with a total installed capacity of 732 MW, seven grid-connected Heavy Fuel Oil (HFO) / Light Fuel Oil (LFO) thermal power plants with a total installed capacity of 156 MW and approximately 90 small power generating units in 25 isolated diesel thermal power plants with a total installed capacity of approximately 45 MW. The transmission and distribution network includes 26 High Voltage (HV) / Medium Voltage (MV) substations and over 9,000 distribution substations, over 2,331 km of HV transmission lines (792 km of 225 kV, 337 km of 110 kV and 1,102 km of 90 kV), and the distribution network of over 31,000 km of MV and LV lines. Actis' initial planned investment is limited to refurbishment and upgrade of existing facilities (e.g. refurbishing generation units at the Edea hydropower facility, addressing Alkali aggregate reaction (AAR) at the Song Lou Lou dam and replacing rotten and fallen poles in the LV distribution network).

The IFC provided a corporate loan to AES Sonel, with the loan agreement signed in 2006, to support the implementation of the Company's 5 year Investment Plan (2005 – 2009). For this transaction, the IFC undertook environmental due diligence in 2006 against Safeguard Policies,

and the Environmental Review Summary was publicly disclosed on March 24, 2006. Since 2006, the IFC has been receiving Annual Monitoring Reports from AES Sonel and has undertaken regular supervision/monitoring missions according to IFC E&S review procedures with the most recent visit in July 2012.

Actis will also assume AES' responsibilities for the two Independent Power Producer (IPP) projects using its wholly owned subsidiary Globeleq Africa Holdings (GA). The acquisition of these two IPPs (Kribi Power Development Company Project and Dibamba Power Development Company Project) is covered in a separate ESRS.

Actis is a pan-emerging markets investment firm that was formed in July 2004. Actis is investing in the Project through its third energy fund, Actis Energy 3, which invests in electricity generation and distribution businesses in Latin America, Africa and Asia. Actis has experience investing in energy projects in Latin America and Africa, including developing Cerro de Hula, the largest wind farm in Central America and Umeme, a power distribution company in Uganda. It operates under Environmental, Social and Governance (ESG) standards that reflect the requirements of World Bank Group standards, as well as adherence to the UN-backed Principles for Responsible Investment (UNPRI).

For the Project, MIGA due diligence relied in part on the previous due diligence undertaken by the IFC, as well as information available from their recent supervision missions. MIGA's due diligence also reviewed the results of the recent audit commissioned by Actis as part of their due diligence for the acquisition.

## **B. Environmental and Social Categorization**

The Project is categorized as Category B under MIGA's Policy on Environmental and Social Sustainability (2013) because the potential risks and impacts are limited, few in number, site specific, largely reversible and readily addressed through mitigation measures. The key environmental and social issues associated with the project include: environmental, health and safety performance of the current operations; compliance with permitting requirements; air emissions (including greenhouse gases); water supply and quality; soil contamination (PCBs, hydrocarbons and arsenic); hazardous and non-hazardous waste management and risks associated with workers and community health and safety.

## **C. Applicable Standards**

While all Performance Standards are applicable to this investment, current information indicates that the investment will have impacts which must be managed in a manner consistent with the following Performance Standards:

- PS1: Assessment and Management of Environmental and Social Risks and Impacts
- PS2: Labor and Working Conditions
- PS3: Resource Efficiency and Pollution Prevention
- PS4: Community Health, Safety and Security

- **PS5: Land Acquisition and Involuntary Resettlement**

All AES Sonel facilities are currently operating, no further greenfield investment is planned. There will be no vegetation clearance or habitat disturbance or disturbance to cultural assets resulting from Actis' acquisition of AES Sonel, and therefore, PS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resource) and PS 8 are not triggered for this Project. While there are indigenous people (Bakola also known as "Pygmies") living in the regions where the Project operates, none are specifically affected by the Project, thus PS 7 does not apply.

The World Bank Group (WBG) Environmental, Health, and Safety (EHS) guidelines applicable to this project include the General Guidelines and sector-specific EHS guidelines for Thermal Power Plants and Electric Power Transmission and Distribution.

#### **D. Key Documents and Scope of MIGA Review**

The following key documents were reviewed by MIGA:

- AES Sonel environmental and social Annual Monitoring Report (2012);
- Environmental Review Summary and attachments (IFC, March 2006, available at [www.ifc.org/disclosure](http://www.ifc.org/disclosure));
- Sonel Project Overview (Actis, 2013);
- Back to Office Report (IFC, July 2012).

In addition to the due diligence documentation for the Project, MIGA's review of this Project also comprised phone conferences with Actis ESG staff and review of engineering and environmental assessments and due diligence studies undertaken by independent consultants on behalf of Actis in preparation for the transaction. MIGA also reviewed email exchanges between IFC and AES and back to office reports from recent IFC supervision site visits.

#### **E. Key Issues and Mitigation**

##### PS1: Assessment and Management of Environmental and Social Risks and Impacts

MIGA's assessment considered: the Company's system for the management of its environmental, occupational health and safety, performance in the establishment and operation of its facilities; and compliance with national and local permitting requirements.

##### *Social and Environmental Assessment:*

The engineering due diligence review of the existing operations undertaken by independent consultants included a review of the environmental, health and safety performance of AES Sonel's generating facilities. Actis also commissioned two specific environmental and social

assessments of all AES Sonel sites as part of their due diligence. These two assessments included a Fatal Flaw Analysis and an assessment of contaminated land issues (refer to the section on PS3 for more information), undertaken by independent international consulting firm.

Under Cameroonian legislation, all of AES Sonel's existing facilities are required to have environmental authorizations from Ministry of Environment and Protection of Nature. An application for environmental authorization requires an environmental audit undertaken by an independent consultant. AES Sonel inherited a lack of authorizations for some of their generation and transmission facilities, and since 2006, they have been working toward achieving authorization for all facilities. Currently, there are 59 existing sites without authorizations. Actis has committed to continuing (and expediting where possible) with the completion of the existing permitting process started by AES Sonel.

Actis has also committed to commissioning environmental and social studies where necessary. While at this stage, capital investment is not anticipated to include new construction, if new construction is planned, Actis will undertake environmental and social assessments, including public consultation and stakeholder engagement (as per their internal due diligence procedures, which are consistent with MIGA's PSs).

*Management Program and Monitoring:*

The IFC due diligence and subsequent supervision has found the AES Sonel ESMS to be generally in compliance with requirements in PS 1 though implementation could be improved. The due diligence undertaken by independent consultants on behalf of Actis also identified weakness in the implementation of the ESMS, and developed an action plan to improve implementation.

Actis has committed to implementing an environmental monitoring program consisting of regular ESG audits to track performance against the relevant standards e.g. international air emissions and ambient air quality standards, IFC / MIGA performance standards and to ensure annual stack emissions testing for thermal plants and water contamination testing. In order to ensure management commitment in implementation of AES Sonel ESMS, Actis intends to create a Board sub-committee focused on ESG matters specifically for this Project.

*Organizational Capacity and Training:*

According to E&S due diligence information provided by Actis, there are currently a number of vacancies within the AES Sonel EHS team. Actis has committed to conducting a review of the EHS team at AES Sonel and assess resource needs, seeking to strengthen this where appropriate. Actis can also provide experience from its central ESG team, and access to expertise from other portfolio companies.

Actis plans to expand and enhance AES Sonel training programs after the transaction. Two specific areas that will be addressed are improved management of oil spills and improved approach to public safety.

*Reporting:*

Environmental and social reports on the Project are already regularly prepared for multilateral project lenders (i.e. the IFC, DEG, Proparco, EIB). These reporting practices will be refined for consistency with Actis' / GA's annual reporting requirements (which are consistent with the requirements of MIGA). Based on the results of the due diligence, Actis has prepared an Environmental and Social Action Plan for the Project. Actis will track performance of the Project against this Action Plan, and report to MIGA annually on the status of actions.

### PS2: Labor and Working Conditions

AES Sonel currently has 3,609 employees and 252 subcontracted meter readers. The planned capital investment will result in the hiring of additional contractors and possibly additional employees. Key functions such as safety and environmental management will have a more direct report line to senior management.

AES Sonel's HR policy includes non-discrimination and equal opportunity provisions. Wages, working conditions and other employee policies are negotiated in collective bargaining agreements with the sector's unions. Unions are the official representatives of all workers, and sit in for them in negotiations with management or the government. As part of the framework agreement (2013) signed with the Government of Cameroon, Actis has committed to continuity of employment and maintaining employee rights. The current wages and benefits package compares favorably to the country-wide and sector standards, and, as required by the framework agreement, Actis will honor the current employment conditions. IFC supervision indicates that HR policies and procedures are currently in compliance with the requirements of PS 2.

Actis' integration plan includes improvement in HR processes (including recruitment, training and development of personnel), implementation of standalone HR policies and procedures, and review of remuneration and incentive structures. Actis will ensure HR policies and procedures continue to be compliant with PS 2 requirements.

#### *Occupational Health and Safety:*

AES Sonel's Occupational Health and Safety Management is compliant with the requirements of PS2, however due diligence identified some compliance gaps with the WBG EHS Guidelines. Actis' integration plan includes enhancement of Health and Safety Procedures to ensure consistency with international standards.

### PS3: Resource Efficiency and Pollution Prevention

An Environmental and Social Fatal Flaw Analysis and subsequent contaminated land assessment were undertaken, and summarized in the 'Sonel Project Overview' (Actis, 2013). These reports identified the primary pollution concern to be soil and groundwater contamination (fuel oil and PCB contamination from improper storage and handling of oil filled transformers and the use of arsenic and other heavy metals from wood pole treatment). Most of the contamination is limited to AES Sonel properties; however, there is one location where hydrocarbon contamination has migrated off-site. This site has been identified as a priority for remediation. While off-site migration has been identified and addressed, there has been no identified impact from this contamination on local communities and surface water resources. The contamination is being

monitored, and the extent of contamination mapped. Consultation has been undertaken, and will continue throughout the remediation process, with the community in the vicinity of the contaminated site. The consultation undertaken by AES Sonel included: disclosing information on the offsite contamination to the Government of Cameroon, and then prior to the commencement of the remediation works, three pre-meetings were held with the traditional ruler in early and mid-October 2013 and a full public consultation was held on 25th October 2013. At the end of the remediation process a close out meeting shall be held with the local communities in collaboration with AES Sonel CSR and Communication staff and site management. Monitoring will continue after remediation works have been completed.

AES Sonel also owns a wood pole treatment facility with an installed capacity of 100,000 pressure treated wood poles per year. Wood for the poles is 100% sourced from third party plantations in the North West region (Nkambe and Kumbo). Felling down of these trees is done by licensed contractors. In 2001, this plant was converted from the use of K 33 Oxide (Copper Chromium Arsenic - CCA) to the use of the less toxic Tanalith (Copper Chromium Boric Acid - CCB).

Contaminated areas are currently being monitored. Contaminated material has been removed from some sites, and is currently stockpiled. AES Sonel does not currently have plans for permanent removal of contaminated material. Actis will support AES Sonel in preparing a soil and water remediation program, including identifying an approved disposal site (one certified to handle PCB contaminated material) for permanent disposal, develop a community engagement strategy in affected areas (if required), undertake further studies to capture the full extent of the issue, and ensure that equipment storage practices are improved to prevent further pollution.

Further assessment of air, noise and water emissions will be included in the environmental and social audits undertaken to fulfill permitting requirements. While some monitoring takes place, air, noise and water emissions are currently not systematically monitored. As part of the transaction, Actis has committed to pursuing more systematic monitoring and reporting of air emissions.

AES Sonel uses 3 types of larvicides to dose hydropower reservoirs and plant outflows to prevent Onchocerciasis (or River Blindness) – an endemic illness caused by the bite of a small fly (*Simulium* or Blackfly). The use of larvicides was reviewed with the assistance of the Dutch Royal Tropical Institute (KIT), and the findings indicated that dosing was effective in controlling the blackfly population, and the chemicals resulted in no residual impact on the local community.

The 2012 AMR indicated that AES Sonel achieved satisfactory compliance with requirements of PS 3 and WBG EHS guidelines; however IFC monitoring has identified only partial compliance with PS 3. The key issues identified by the IFC include contaminated land (as addressed above) and the need for better monitoring and reporting of emissions. Further, the AMR indicated that AES Sonel initiated a program in 2012 to reduce emissions and improve energy efficiency at all facilities.

#### PS4: Community Health, Safety and Security

Actis' due diligence and IFC supervision identified that approximately 10 public network fatalities and 20 to 30 non-fatal public injuries occur per year – most commonly caused by direct contact with energized cables, which have fallen to the ground due to rotten wooden poles. Actis has already begun preparing to launch a new safety program, which will be similar to the program that was implemented in its distribution network in Uganda (Umeme), which has been effective in reducing public fatalities and injuries. The Safety Officer from Umeme visited AES Sonel facilities, and conducted initial safety training in December 2013. The safety program to be implemented will include additional preventative maintenance (e.g. replacement of rotten and fallen poles) and increased community outreach programs.

The 2012 AMR also reported 18 road accidents in 2012. A road safety program was implemented in 2012, which included education campaigns, vehicle inspection, defensive driving courses for drivers, a speed monitoring program, and monitoring of driver behavior. The adequacy of the road safety program will be considered as part of Actis' new safety program, and will be revised and improved as required.

Actis has also committed to assessing the possibility of adjusting the compensation practices to take into account safety metrics.

#### *Security Arrangements:*

AES Sonel has an internal security team of approximately 8 people, which oversees four (4) security sub-contractor companies with a total of about 1,000 security staff. Security teams are well organized and undertake training before being deployed. Sub-contracted companies are on two year contracts, and the internal security regularly reviews the performance of the contractor to ensure they meet the company's standards. Security teams guard important assets, including generation facilities and major substations, as well as the offices where bills are paid. Private security guards are unarmed, but at some strategic sites like the dams, selected substations and generation plants, the Government provides AES Sonel with armed soldiers to enhance security.

Once fully invested, Actis will ensure that security contractors and military personnel providing security to AES Sonel sites are adequately trained, including training in the adequate use of force, appropriate conduct toward workers and affected communities and human rights considerations.

#### PS5: Land Acquisition and Involuntary Resettlement

There is currently some resettlement ongoing in several sub-projects (Bekoko-Nkongsamba Transmission Line among others) in which Sonel is resettling populations and compensating them in accordance with well laid out plans and guidelines agreed with lenders, and which is closely monitored. If transmission lines and substations in line with the growth of the electricity sector need to be built, AES Sonel will apply their Resettlement Policy Framework, which has been reviewed by lenders, to undertake an expropriation process to incorporate the land into the public domain of the State, and then the State allows them to occupy the sites and corridors.

### **F. Environmental Permitting Process and Community Engagement**

As described above, there are still several sites without the proper environmental permits. The Ministry of Environment had previously given AES Sonel until July 2015 to complete the permitting process for sites.

Community engagement is currently undertaken in an ad-hoc manner. AES Sonel has 6 Corporate Social Responsibility (CSR) staff that are responsible for engaging with local communities, and a customer service call center to respond to service issues and concerns. Actis will formalize and standardize the community engagement program across AES Sonel facilities. Actis also plans to enhance the role of the customer service call center to incorporate grievance management.

### **G. Availability of Documentation**

The following listed documentation is available electronically as PDF attachment to this ESRS at [www.miga.org](http://www.miga.org):

- [Environmental and Social Action Plan \(ESAP\)](#) for Actis acquisition of AES shares in AES SONEL (January 2014)

It is also available by contacting:

- Mark Goldsmith  
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Once the transaction is complete, and GA has established an office in Cameroon, the details of that location will be disclosed.