Early Warning System

WB-P145657

Senegal Banda Gas to Power Guarantee

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Quick Facts

Countries	Mali, Mauritania, Senegal
Specific Location	Kayes, Senegal River, Tasiast, Nouadhibou, Nouakchott
Financial Institutions	World Bank (WB)
Status	Active
Bank Risk Rating	A
Voting Date	2014-05-29
Borrower	REPUBLIC OF SENEGAL - MINISTRY OF FINANCE
Sectors	Energy
Potential Rights Impacts	Cultural Rights, Healthy Environment, Housing & Property, Labor & Livelihood, Right to Food, Right to Health, Right to Water
Investment Amount (USD)	$ 99.00 million
Project Cost (USD)	$ 99.00 million

Project Description

According to Bank documents, the purpose of this project is "to enable production of natural gas for generation of electricity to reduce the cost and increase the supply for Mauritanian households and industry, and enable regional integration through exports of electric power from Mauritania to Senegal and Mali." The project will:

- develop pipelines
- a gas field
- and the construction of power plants.

According to bank documents, The Banda Gas-to-Power Project involves the development of (a) an upstream offshore gas field (the Banda gas field located55 km off the coast of Mauritania in the North Atlantic Ocean), offshore and on-shore pipelines with a gas processing facility, and (b) the downstream construction of two power plants near Nouakchott in Mauritania and transmission lines to Nouadhibou and Tasiast in the North, all the way down to Senegal to the south. The Banda Gas-to-Power Project aims to develop natural gas resources from the Banda gas field, which will function as the primary fuel source for generated power that will serve Mauritania's domestic, residential, and industrial sectors. The project should also export power to Senegal and Mali. Bank documents further state "Exports to Mali will not require the construction of new transmission infrastructure."
According to Bank documentation, The Mauritanian government "intends that the Banda gas will be used primarily to feed a 300MW power plant in Nouakchott by 2015/16. The project envisions a new transmission line connecting Nouakchott to Nouadhibou and Tasiast (site of the Kinross gold mine). The project could export 80-100 MW to Senegal and Mali through the existing OMVS (The Organisation de Mise en Valeur du fleuve Senegal transmission line links the power networks of Mali, Senegal, and Mauritania to the Manantali hydropower plant in Mali) transmission line. These exports are the object of ongoing discussions between the governments of Mauritania, Senegal and Mali. Power generation may be developed in two phases: a first dual fuel power plant of up to 180 MW that can run on either heavy fuel turbine plant of up to 120 MW. Current estimates indicate that the first phase could start generation by the end of 2014, whereas the second phase would start operating in 2016."

Early Warning System Project Analysis

RISK CATEGORIZATION

This project is categorized as a category *A*

With seven triggered environmental and social safeguards, including involuntary resettlement, the World Bank concluded that the project should be categorized as a Category *A* project, the highest possible rating in terms of environmental and social impacts.

The following performance standards were triggered:

PS1: Assessment and Management of Environmental and Social Risks and Impacts
A full environmental impact assessment is under way because of the nature of the risks of the construction of this project. Some of the risks include: vessel collision risk,
economic displacement through loss of access to fishing grounds (in the unlikely event of a spill), water and sediment contamination, discharges of commissioning fluids, noise, habitat loss and impacts to marine and coastal habitats and species, well blowout and pipeline rupture, soil erosion, hazardous materials and waste generation and air emissions (including CO2). According to World Bank documentation *The generation of liquid effluents and the risk of accidental spillage of fuel or chemicals may generate potential impacts on surface and groundwater. All water discharges associated with the project will be treated in an oil/water separator and evaporated (process water and
regeneration of demineralization installations) or treated in a septic tank and left to seep into the ground (domestic effluent). Given the low volume of effluent expected, the lack of surface water in the vicinity of the project sites, and the natural protection of important groundwater aquifers,* the bank maintains, *impacts should be limited.* Noukachott is the most populated city in Mauritania with a population of over 558,000, which makes the 20 kilometer distance between the city and the offshore drilling facility a potential threat to the livelihoods of many.

While the bank does not provide the actual percentage of possibility, World Bank documents state *The risk of a fuel oil (diesel) spill into the marine environment is inherent in all offshore activities. The likelihood (probability) of significant spills, ie those that can reach the coastline or other sensitive areas is very low with most spills being very small and having only limited environmental effects. Considering that the Banda Gas development wells are only targeting gas bearing formations, not oil-bearing formations, the assessment does not consider modeling for spills resulting from accidental well blowouts.*

PS2: Labor and Working Conditions
According to bank documentation *The clients will establish safe and healthy working conditions for their employees, promote fair treatment, non-discrimination and equal opportunity, promote compliance with national employment and labor laws, protect workers, especially vulnerable groups, will not employ children and avoid the use of forced labor. Adequate Environmental, Health and Safety Plans will be prepared and implemented by Tullow, SPEG and their contractors and sub-contractors, as well as SOMELEC, for the Mauritania segment of the South High Voltage Line.*

PS3: Resource Efficiency and Pollution Prevention
According to bank documentation *The clients will avoid or minimize impacts on human health and the environment by reducing pollution from project activities (waste management plans will be prepared as part of the EMPs in the case of the upstream component). The clients will promote more sustainable use of natural resources, such as water and energy, and reduce project-related greenhouse gas (GHG) emissions.* World Bank documents further state *Best practice and good operation management will be applied to enhance efficiency and where possible minimize CO2 emissions.* World bank documents also identify *Greenhouse gas reduction strategy with focus on optimisation of overall energy efficiency and reduction in flaring and venting: as a mitigation and management measure for greenhouse gas emissions. It is unclear of as to whether these are the best technologies available as the document does not specify.

People Affected By This Project

ENVIRONMENTAL AND HUMAN RIGHTS ASSESSMENT

Right to a Healthy Environment

The first principle of the 1972 Stockholm declaration states *Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.*
This project requires the construction of power plants and a line that will run from Mauritania to Senegal and Mali. The drilling alone has the potential of having detrimental impacts on the environment]. World Bank documents, however, state *The majority of these impacts from the drilling, completion, installation, and commissioning activities were assessed as being Negligible or Minor*. Still, **the potential impacts resulting from an unlikely spill or hydrocarbons at sea were assessed as moderate. These would be assessed with an accidental loss of fuel from mobile offshore drilling unit of the supply vessels used in the drilling subsea, subsea installation, or pipelay phases.*

While the possibility of an oil spill exists, World Bank documents claim *Tullow's proposed emergency response procedure would likely prevent the majority of diesel reaching the shoreline.* It is also believed that that drilling should not affect sea users and sea life because all drilling will occur *at a distance of 55km away from the coast.* It is noted, however, that drill cuttings discharge offshore could cause elevated levels of total suspended solids concentration and depositional thickness. The environmental impact assessment claims that it should be *short term and dissipate rapidly as a result of the dispersion capacity of the local marine environment.*

World Bank documentation further states that in order to prevent and train for fire outbreaks *Emergency response plans and teams have been established to address reagent and fuel spills, fires, and accidents requiring medical attention.* Mitigation and management measures in Bank documents include: *Active fire protection; Gas leak detection devices; Development of a fire and life safety plan for workforce; Coordination with local authorities for external emergency response; 300m exclusion zone without permanent infrastructure (except Project infrastructures) around the gas treatment plant; Markers will be provided to prevent accidental excavation damage to the pipeline, and umbilical 60 m exclusion zone with no permanent infrastructure on both sides of the pipeline; Periodic monitoring of the onshore part of the pipeline to reduce the likelihood of any intentional damage to it.*

There will also be the prevalence of hazardous materials that will impact the environment due to the construction of the project. The hazardous materials include: batteries, chemical residues, clinical and medical waste, oil filters, oil rags and absorbents, and used oil. Likewise, the development of this project will generate varying amounts of air pollutants and greenhouse gas emissions from combustion sources such as generators and thrusters on the Mobile Offshore Drilling Unit, diesel engines on the support and installation vessels and flare emissions from the gas plant will thus increase yields of greenhouse gas emissions within the communities which overlaps with the right to a healthy environment.

The following questions should be raised to determine whether or not these communities have had violations of human rights due to the construction of this project:

- Has the government provided information on an environmental action plan in place for reducing the ecological effects on local communities after the construction of this project?
- What options do you have (legal or otherwise) if the environmental impacts of the proposed operations become a problem for local communities?
- Do you feel that your natural environment (air, water, land, animals, and plants) has changed since the start of the investment project?
- Where will solid waste, hazardous waste, and other waste products be disposed of and what impact is this likely to have

Investment Description

- World Bank (WB)

The borrowers are the Republic of Senegal, The Islamic Republic of Mauritania, and the Republic of Mali. The Guarantor is the International Development Association and the Multilateral Investment Guarantee Agency of the World Bank. Gas Joint Venture Partners, Society de Production de Electricita partir du Gaz (SPEG) and Society Mauritanienne de Electricita (SOMELEC) are sponsors and beneficiaries of the investment. To date, there have been no complaints filed against the World Bank for the construction of this project.

There have not been any complaints filed to the World Bank Inspection Panel regarding Bank-supported projects in Senegal, Mauritania, and Mali to date (have not, (but there are previous human rights abuses in these countries that have been documented by various organizations, some of which are summarized below).

Tullow Oil is considered an Independent Finance Corporation involved with the design, development, and the operation of all constructed facilities. Tullow Oil has its own environmental standards that are applicable to all of its operations. Tullow Oil has four key areas with a set of its own project tools to support the delivery of the finished product. The four areas are: Biodiversity, Greenhouse Gases, Resource Management, and Social-economic aspects. With the issue of biodiversity in mind, Tullow Oil seeks to avoid negative impacts to biodiversity. With greenhouse gases, Tullow Oil aims to promote efficient use of energy and responsibility. With Resource management, Tullow Oil promotes the sustainable use of natural resources. Finally, Tullow Oil wants to avoid any potentially negative impacts on the socio-economic welfare of the local communities involved with the construction of various projects. According to bank documents, "Tullow always ensures compliance with national labor laws and Independent Finance Corporations (IFC) Performance Standard 2." Standards and policies are claimed to be reviewed on an on-going basis during projects to ensure that they are constantly updated and remain compliant with any defined standards. According to bank documents "Tullow's safety rules are designed to manage high risk activities that have the potential to have a negative impact on their staff, the environment, and the surrounding communities." Likewise, bank documents state "Tullow will prevent community disturbance through eliminating or reducing disruption at an acceptable level." It is worth noting that Mauritania "currently does not have any specific national standards and procedures for the regulation of noise." In fact, according to bank documents "no legal thresholds exist at this time during the drafting of the EIA" which refers to the Environmental Impact Assessment.

PAST BANK FUNDING

World Bank documentation states "The World Bank has approved 122 projects for Senegal totaling about US$3.0 billion. The commitment value of 20 ongoing International Development Association (IDA)-financed operations is about US$700 million equivalent, with an undisbursed balance of about US$460 million. The 20 operations are in agriculture, rural development, infrastructure, environment, transportation, population/health/nutrition, social protection, energy/water, public and private sector development, and natural disaster management. Portfolio performance is discussed quarterly with the government."

Regarding Mauritania, World Bank documentation states "At present, the Bank's portfolio in Mauritania includes six International Development Association (IDA) funded operations, including two regional projects, representing a total commitment of $165 million. The IDA portfolio is complemented by a number of trust funds, for a current total committed amount of $25.5 million."

In regards to Mali, World Bank documentation states "The IDA portfolio in Mali amounted to US$892.25 million composed of 21 operations, including seven regional operations. A breakdown of the portfolio by sector is as follows: Energy 25%; Transport 18%; Rural Development 25%; Public Sector Development 17%; Human Development 4%; Environment 7%, and Private Sector Development 4%."

Contact Information

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CONSULTATION PROCESS

According to the Environmental Impact Assessment, "Stakeholder engagement activities started during the scoping stage of the project and ran throughout the Environmental Impact Assessment. The objective was to ensure that sources of existing info and expertise are identified, legislative requirements are met and that stakeholder concerns and expectations are addressed. 26 consultation meetings were held with stakeholder groups or organizations from Nouakchott and coastal communities in July 2012 and between November 2012 and February 2013. A public consultation meeting attended by nearly 60 representatives of ministries, local governments, fishermen unions, and non-governmental organizations was held on 20th March 2013 in Nouakchott."

ACCOUNTABILITY MECHANISM OF WORLD BANK

The World Bank Inspection Panel is the independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by a World Bank-financed project. If you submit a complaint to the Inspection Panel, they may investigate to assess whether the World Bank is following its own policies and procedures for preventing harm to people or the environment. You can contact the Inspection Panel or submit a complaint by emailing ipanel@worldbank.org. You can learn more about the Inspection Panel and how to file a complaint at: http://ewebapps.worldbank.org/apps/ip/Pages/Home.aspx.

Bank Documents

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