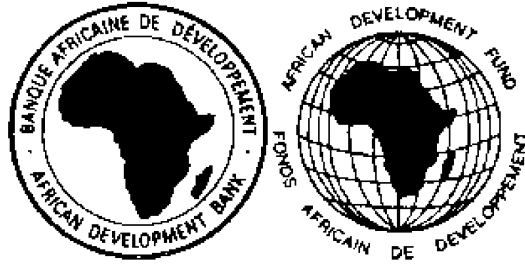


AFRICAN DEVELOPMENT BANK GROUP



SENEGAL - SENDOU COAL FIRED POWER PLANT PROJECT ELIGIBILITY REPORT FOR COMPLIANCE REVIEW

BCRM DEPARTMENT

April 2017



Independent Review Mechanism

Eligibility Report for Compliance Review

SENEGAL - SENDOU COAL FIRED POWER PLANT PROJECT

Request No.:RQ2016/2

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Acknowledgment

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Acronyms and Abbreviations

AfDB	African Development Bank Group
BOAD	Banque Ouest Africaine de Développement
CES	Compagne d’électricite du Senegal
CRMU	Compliance Review and Mediation Unit
DEG	Deutsche Investitions – Und Entwicklungsgesellschaft
ESMP	Environmental and Social Management Plan
ESAP	Environmental and Social Assessment Procedures for Private Sector
ESIA	Environmental and Social Impact Assessment
FMOIRP	Nederlands Financierings-Maatschappij voor Ontwikkelingslanden N.V.
GoS	Government of Senegal
IRP	Involuntary Resettlement Policy 2003
IRM	Independent Review Mechanism
ISS	Integrated Safeguards System
PAPs	People affected by the Project
RAP	Resettlement Action Plan
Ops Com	Operations Committee
SENELEC	Senegal National Electricity Board

1. Scope of the Eligibility Report

The objective of this Report is to assess the eligibility of the Request relating to the Sendou Coal Power Plant. According to Paragraph 51 of the Operating Rules and Procedures of the Independent Review Mechanism (IRM) (hereinafter the “IRM Rules”) which were approved by the Boards of Directors of the African Development Bank Group (AfDB) in January 2015, the Director of the CRMU and the IRM Experts jointly determine the eligibility of the request. They determine whether *“there is prima facie evidence that the Requestors have been harmed or threatened with harm by a Bank Group-financed project and that the harm or threat was caused by the failure of the Bank Group’s staff and Management to comply with any of the Bank Group’s relevant policies and procedures.”*¹ If the Report finds prima-facie evidence for non-compliance with the relevant AfDB Policies and Procedures and prima-facie evidence that this non-compliance leads to harm or likely harm, the IRM recommends to the AfDB Boards of Directors to authorize a compliance review of the project which is the subject of the complaint.

Any evidence presented in this Report constitutes prima facie evidence. Should a compliance review be authorized by the Boards of Directors, the compliance review will assess the evidence more comprehensively and might draw conclusions which differ from this Report. Positions taken in this Eligibility Report do not prejudice assessments which will be undertaken during the compliance review when a more comprehensive assessment will be conducted by the IRM. A compliance review can also assess non-compliances and related harm which has not been addressed in this Eligibility Report.

The IRM Experts and the Director of CRMU conclude in this report that there is prima-facie evidence for non-compliance with the following AfDB Policies: (i) the Involuntary Resettlement Policy (2003), (ii) the Environment Policy (2004), (iii) and, (iii) the Environmental Review Procedures for the Private Sector Operations. This non-compliance is found to likely cause harm once the project will become operational. The IRM experts and the Director recommend that a compliance review for the Sendou Project be authorized by the Boards of Directors.

2. The Project

The Sendou Coal-Fired Power Plant Project was approved on 25 November 2009 by the Board of Directors as a senior loan of 55 million euros in favor of *Compagnie d’Electricite du Senegal (CES)* to develop and maintain a 125 MW coal-fired power plant located 35 km from Dakar in Sendou, Senegal. In addition, the AfDB approved a supplementary loan of Euros 5 million and had disbursed 55 million euros as of 8 March 2017. The total cost of the Project is Euro 206 million. The Bank co-finances this amount with the Banque Ouest Africaine de Développement (BOAD) and the Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO). The project is being developed on a “build, own, and operate” basis and targets to supply up to 40% of Senegal’s electricity, which currently derives 80% of its electricity from diesel-fueled

¹ See Paragraph 51 (b) African Development Bank Group, The Independent Review Mechanism, Operating Rules and Procedures, January 2015

power generation. The Government of Senegal (GOS) has outlined a strategy for diversifying and increasing domestic power generation capacity with a combination of conventional thermal base load and renewable energy. It is the first coal-fired plant in Senegal. The coal will be imported via sea and unloaded at Dakar harbor from where it will be transported by trucks to the coal storage site on the plant. The project aims at producing at least 925 GWh of electricity a year. The power will be delivered to the national interconnected grid system of SENELEC, Senegal's public electricity utility company. The project includes the development, design, procurement, construction, operation and maintenance of a 125 MW coal-fired power plant on a 22 hectare-site. Power production can be expanded to 250 MW through a second phase project, for which project preparation have not yet started. The project will also build a 1.6 km 225 kV transmission line and associated switchyard to connect the plant to SENELEC.

The project is located about 600 meters away from the Atlantic Ocean and near two communities, the town of Bargny located at 2 km north-west and a fishing village, Minam, with 600 inhabitants to the south. The project is located 500 meters from dwellings, a school, a watercourse, a lake and a water collection point and areas designated for residential developments. A 500 meter buffer zone around the plant is required by Senegalese law. Active on the grounds of the power plant is a substantial group of women who regularly – since many generations – dry fish on the ground which they receive from fishermen at the Bargny harbor. These activities require space as fish is laid out on the ground for drying. Between 1000 and 4000 women pursue this activity for about 9 months during the year. Dried fish is then sold to male workers who package the dried fish and transport it to markets in Dakar and to the harbor for export.

Project implementation has experienced numerous delays. Implementation only started in August 2013. The Sendou power project has subsequently experienced further implementation delays due to shareholder issues resulting in cost overruns. On 30 October 2015, the Board of Directors of the AfDB subsequently approved the debt restructuring of the Sendou Power Project through (i) an amendment to the existing loan terms; and (ii) a provision of a supplementary Senior Loan Facility of 5 million euros.

The Project Company is Compagnie d'Electricite du Snegal SA (CES), whose original sponsor was Nykomb Synergetics of Sweden. Late in 2012, AFG, an investment bank of Morocco joined as equity partner. In October 2015, Quantum Power acquired the equity interest of AFG and became joint equity sponsor with Nykomb. The construction of the power plant has been contracted out to two Indian companies: Bharat Heavy Electricals Limited (BHIEL) and Promac Engineering Industries Ltd (Promac). The new Project Sponsor, Quantum Power, took necessary measures to relaunch the construction of the power plant, and to secure additional equity needed to complete the Project. Construction resumed in January 2016 and the Project is now scheduled to begin commercial operation by end of 2017.



Figure 1: Sendou Power Plant under construction. *Source:* IRM

3. Regulatory Framework of the Eligibility Assessment

The Compliance Review Process is governed by Section 7 of the IRM Operating Rules and Procedures of 2015. Paragraphs 50-54 address the eligibility process.

Paragraph 51 specifies that: *“Ifthe Director and the IRM Experts determine that there is prima facie evidence that the Requestors have been harmed or threatened with harm by a Bank Group-financed project and that the harm or threat was caused by the failure of the Bank Group’s staff and Management to comply with any of the Bank Group’s relevant policies and procedures, they shall within thirty (30) business days of such determination submit a report recommending a compliance review of the project at issue tothe Boards if the Request relates to a Bank-Group financed operation that has been approved by the Boards.”*

Paragraph 52 states: *“The compliance review recommendation shall include draft Terms of References which shall set out the scope and time frame for the compliance review and shall provide an estimate of the budget and a description of additional resources required to complete the review....”*

According to Paragraph 53 of the IRM Rules, if the eligibility report prepared by the IRM Experts and the Director of the CRMU recommends a compliance review, the Boards of Directors may:

“(a) Approve the recommendation(s) on a “non-objection basis; or

(b) Remit the Request to the Director and the IRM Experts to reassess the recommendation regarding the draft Terms of References for the compliance review, with a new recommendation, if any, being submitted to the President or the Boards, as the case may be.”

4. The Request

The Compliance Review and Mediation Unit (CRMU) received two Requests relating to the Construction of the Sendou Coal Power Project. The two requests are attached as **Annex 1** and **Annex 2** of this Report.

The First Request was submitted on 09 May 2016 by two national Civil Society organizations in Senegal, Takkom Jerry, and Lumiere Synergie pour le Development on behalf of some of the people affected by the project (PAPs). The Requestors called for CRMU to handle their complaint through both problem-solving and compliance review. On 15 July 2016, the CRMU received a second complaint which was sent by two individuals, Mr. Cheikh Fadel Wade and Mr. Daouda Gueye on behalf of some other members of the affected communities in Bargny challenging the representational authority of the First Requestors whom they claimed cannot act on behalf of all the PAPs. Standing on their own right, they requested CRMU to register their complaint for compliance review of the project.

The two Requests raise similar issues with regard to the negative impacts of the Sendou coal power plant. The issues include:

- (i) Unviable government policy option to use coal-fired power plant in Senegal because the country does not produce coal and will be obliged to import it from international markets.
- (ii) The selection of the project site is in violation of the applicable Article L13 of the National Code of the Environment. In particular, the Sendou plant site is located near (less than 2 km) an existing cement factory and another coal-fired power plant with a larger capacity of 250 MW is scheduled to be built closer to the same site.
- (iii) Increased vulnerability of communities to air pollution and potential disruption of livelihoods because of the proximity of the coal power plant to the town's water supply, public facilities, including the elementary school, a health center, a kindergarten, the cemetery, and to the site where about 1000 women and other seasonal and temporary workers process fish.
- (iv) Adverse impact of the coal power plant on an historic site where the protected spirit of the village resides and on a nursery for regeneration for marine diversity.
- (v) Breach of the African Development's Bank's environmental, social and human rights standards since there was no agreement signed with the right-holders of land titles, and no compensation was paid to the majority of these holders. In addition, no Resettlement Action Plan was prepared to mitigate the project's negative social impacts.
- (vi) Imminent health risks associated with air pollution due to emissions from the Sendou plant, the cement factory and another coal-fired power plant with the larger capacity of 250 MW scheduled to be built close to the same site. There was no cumulative impact assessment study prepared to measure the effects of emissions from these three plants.
- (vii) Increased vulnerability of the community to the consequences of coastal erosion.
- (viii) Inadequate public consultations with PAPs.

Following up with these the two complaints, the CRMU carried out a preliminary assessment of the issues contained in the Requests and conducted a field mission to Senegal from 07-10 July 2016. The Director of CRMU established that both Requestors fulfilled the requirements of Paragraph 14 of the IRM Rules by providing CRMU with a written signed proof that they have authority to act on behalf of the PAP's. The Director of CRMU was satisfied that the representatives who sent the complaints were authorized by the PAPs. Also, the two Requestors asked CRMU to handle their complaint separately and through compliance review.

In keeping with Paragraph 23 of the IRM Rules, the Director of CRMU registered the two complaints as one Request on 10 August 2016² since the two complaints raised the same substantive issues. The FMO, which also finances the project, received a complaint from the two requestors in May 2016 and June 2016, respectively.

² Notice of Registration, Request No.: RQ 2016/2, Country Senegal, 10 August 2016.

5. The Management Response

In accordance with Paragraph 36 of the IRM Rules, Management Response to the Request was submitted to CRMU on 04 October 2016 (see **Annex 3** of this Report). The issues raised by the Requestors and the corresponding Management Response are summarized below.

5.1. Unviable Government Coal Power Policy Option

The Requestors claimed that the government policy option to use coal-fired power plant is unviable since Senegal does not produce coal and will be obliged to import it from international markets. **The Management considered that the viability of government coal power policy was adequately assessed during project preparation. Management concluded that compared to imported diesel, the coal power generation will be cost effective and will help the country to have reliable supply of power to address challenges of growing demands. The Management mentioned that the inadequate power supply has led to rationalization of daily supply of electricity. The additional energy supply provided by the Sendou plant would allow the country to meet the high demand and will therefore contribute to economic growth through employment and attracting businesses.** ³

5.2. The Selection of the Project Site

The Requestors argued that the selection of the project site violates Article L13 of the National Code of the Environment. In particular, the Sendou plant site will be placed nearby an already existing cement factory (located at less than 2 km away) and another forthcoming coal-fired power plant with larger capacity of 250 MW to be built close to the same site. **The Management is of the view that the selection of project site complies with the National Environmental Code, particularly because the project obtained proper permits; the plant will be surrounded by a 500 meter buffer zone which will protect residences and waterways. Management stated that the plans to build an additional coal fired power plant close to Bargny have been cancelled. The impact assessment took into account the existing cement factory. The impact assessment thus was adequately done.** ⁴

³ Management Response, pages 5-6

⁴ Ibid., page 6.

5.3. Health Risks and Disruption of Livelihoods

The Requestors stated that the plant will increase vulnerability of communities to air pollution and potentially will disrupt the livelihoods because of the proximity of the coal power plant to the town's water supply, public facilities including an elementary school, a health center, a kindergarten, cemetery, and to the site where over 1000 women and other seasonal and temporary workers process fish. **The Management stated that the health risks from power plant are mitigated by proximity of plant to local water, fishing processing site and the project design which envisions a custom-built fishing dry facility to optimize the fishing activities instead of current informal land use for artisanal fish drying practices. In addition, the sea water cooling system will restrict flow of velocity of water intake to protect small fish and ingress of larger species in line with the World Bank standards.⁵ With regard to water discharge, a weir system will be constructed to minimize the differential between exit water velocity and tidal velocity.**

5.4. Adverse Impact of the Coal Power Plant on an Historic Site and Marine Biodiversity

The Requestors complained about adverse impact of the coal power plant on an historic site where the protected spirits of the village reside and the existing nursery for regeneration for marine biodiversity. **The Management stated that both issues pertaining to cultural heritage and the nursery for marine biodiversity had been considered in the Environmental and Social Impact Assessment and the Environmental and Social Management Plan (ESIA/ESMP). In addition, further consultations with the local community during project implementation led the project company to leave the Baobab tree within the project site considering the community's value of this tree as protecting the spirit of the village. The Management mentioned that this issue was unknown at the time of Project's appraisal and Board approval.⁶ With regard to water discharge, environmental considerations are incorporated into cooling water intake and outfalls systems to minimize impact on local marine environment, in line with World Bank standards.⁷ In addition, marine expert consultancy firms Royal Haskoing and Fluidyn were commissioned to assess the plant's cooling system and thermal output respectively. The cooling system design will be tailored to ensure compliance with the analysis performed by the two firms, the World Bank and Senegalese legal requirements on thermal discharge. Finally, the impact of the plant on marine biodiversity will be monitored by the Lenders Technical Advisor.⁸**

⁵ Ibid., pages 6-7.

⁶ Ibid. page 7.

⁷ Ibid.

⁸ Ibid.

5.5. Project Breach of African Development's Bank's Environmental, Social and Human Rights Standards

The Requestors claimed that the project breaches the African Development's Bank's environmental, social and human rights standards since there was no agreement signed with the right-holders of land titles, and no compensation was paid to the majority of these holders. In addition, no Resettlement Action Plan (RAP) was prepared to mitigate the negative social impacts of the project. **The Management considered that the project has not violated the AfDB safeguards and human rights standards because from the time the ESIA was conducted until its completion, the project site was free from any type of occupancy and therefore was no need for the project company to prepare a Resettlement Action Plan (RAP). In addition, the Management mentioned that ESMP included mitigation measures to mitigate any potential negative impact of plant on local environment. Implementation of these measures is regularly assessed by the Lenders Technical Advisor.⁹ Moreover, the Government of Senegal acquired the project site and the surrounding areas in 1964 and registered them in the name of the State as required by the law following publication of the intended acquisition in the national Gazette for six months. In September 2009, the GoS transferred the land ownership to SENELEC through a Presidential Decree. Subsequently, CES, the project company acquired the land exclusively to build the power plant.¹⁰**

5.6. Cumulative Impact Assessment and Coastal Erosion

The Requestors stated that there was no cumulative impact assessment study prepared to measure the effects of emissions from these three industrial sites. In addition, the plant will increase vulnerability of the community to the consequences of coastal erosion. **The Management Response mentioned that plans to construct another larger power plant in Bargny have been cancelled. In addition, the ESIA included standards and limits for air quality, noise and disposal of waste water and the compliance with these standards will be monitored and reported by the Lenders Technical Advisor during construction and operational phases of the project. Moreover, the Management stated that the Technical Advisor will review the updated model which should be completed in the last quarter of 2016. The Advisor will assess the new technology that has been selected as more efficient and less polluting using low Sulphur coal. Concerning community vulnerability to effects of coastal erosion, Management stated that communities in Minam and Bargny villages have already been affected by high level of coastal erosion. The Management pointed out that as a result,**

⁹ The Management Response, pages 7-8.

¹⁰The Management Response, page 8.

Minam community have been relocated several times. The Plant will only limit local population to move upland from eroded sites. In addition, the Management noted that there is no record of formal agreement between CES, SENELEC and government officials on allocated parcels of land within the project site. Out of good will, the Management and the new project management team will follow up with the resettlement issues resulting from coastal erosion.¹¹

5.7. Public Consultations

The Requestors stated that the project public consultations with PAPs were inadequate. The Management considered that consultations with local communities and PAPs was adequate since the inception of the project.¹²

6. The Eligibility Assessment

Paragraph 51 of the IRM Rules requires the eligibility mission to determine whether there is prima-facie evidence that the Requestors have been harmed or threatened with harm by a Bank Group-financed project and that the harm or threat was caused by the failure of the Bank Group's staff and Management to comply with any of the Bank Group's relevant policies and procedures. The eligibility assessment is based on information collected during the IRM mission to Senegal (24-30 November 2016) and from the reviewed project documents. An important input into this eligibility report are the reports prepared by the external monitors who were engaged by the Donor Group and funded by the AfDB to monitor compliance with donor safeguard policies.¹³ These reports highlighted areas of non-compliance. The Management response stated that the role of the external technical advisor “*encompasses among others (i) reviewing the environmental and social management plans; (ii) ensuring overall compliance of these plans, monitoring reports and other documents with national legislation and regulations, and (iii) assessing the social performance of the project and measures undertaken to minimize social risks and enhance social benefits for the surrounding communities.*” An additional important document is the “Assessment Report on Environmental, Social and Health & Safety” (2014), which donors commissioned to assure that the project is compliant with donor safeguard policies.¹⁴

The program of the eligibility mission and list of the people met is included as **Annex 4** and **Annex 5**, respectively.

¹¹ Ibid., page 9.the

¹² Ibid., page 10.

¹³ See Parsons Brinckerhoff, Sendou 125 MW Power Plant, Senegal: Environment and Social Monitoring Report 001 (January 2014), Report 002 May 2014, Report 003 August 2014, and WSP Parsonbs Brinckerhoff, 9 May 2016. See also Monkeyforest, Assessment Report Environmental, Social and Health & Safety, September 2014.

¹⁴ Monkeyforest, Social Performance Consulting, Assessment Report, Environmental, Social and Health & Safety, September 2014.

6.1. Is there evidence of non-compliance with the AfDB Policies and Procedures?

(a) **Non-compliance with Involuntary Resettlement Policy (2003)**¹⁵

The *Requestors stated* that the plant will increase vulnerability of communities to air pollution and will disrupt the livelihoods because of the proximity of the coal power plant to the site where over 1000 women and other seasonal and temporary workers process fish. Moreover, the Requestors claimed that the project violates the AfDB's environmental, social and human rights standards since there was no agreement signed with the right-holders of land titles, and no compensation was paid to the majority of these holders. In addition, no Resettlement Plan was prepared. The *Management Response stated* that impacts on women drying fish will be mitigated by the project design which envisions a custom-built fishing drying facility to optimize the fishing activities instead of current informal land use for artisanal fish drying practices. With regard to people's claims that they have titles to the land where the plant is located, the position of Management is that – at the time that the ESIA was conducted until its completion, the project site was free from any type of occupancy and there was no need to prepare a Resettlement Action Plan.

Women Drying and Sorting Fish and associated Temporary workers: The IRM finds that there is prima-facie evidence that the Involuntary Resettlement Policy (2003) should have been invoked because the project causes resettlement of women who have informal businesses consisting of drying fish within the 500 meter buffer zone of the Sendou Power Plant. At least 1000 women drying fish will be prevented from accessing their traditional sites for fish drying once the 500 meter buffer zone around the plant is closed off. This area will therefore become inaccessible once the plant commences operation which is initially scheduled for end of 2017. During the eligibility mission, the IRM visited the Sendou site and observed women living in the village of Bargny come to the site to dry fish which is supplied by fishermen at the Bargny fishing harbor (See Figure 2). Fish drying at this site is a traditional activity which has been carried out for generations and takes place for about 9 months during the year. The IRM also interviewed representatives of these women. The estimations provided to the IRM of the number of women working on the site varied widely, between at least 1000 and possibly as many as 4000. There is however general agreement that not less than 1000 women are engaged in this activity.

¹⁵ The Involuntary Resettlement Policy 2003 is applicable as the project was approved in 2009, prior to the adoption of the AfDB Integrated Safeguards System.



Figure 2: Women drying fish on the land in the buffer zone of the Sendou power plant. Source: IRM

In addition to these large number of women, men were also seen engaged on the same Sendou site in sorting and packing the fish dried by the women (See Figure 3). These workers were estimated at about 100 at the time the IRM visited the site. The packaged dry fish supplies the local markets in Bargny and Dakar. Packaged dry fish is also reportedly exported to some countries in West Africa.

The IRM was informed that these informal business owners do not have legal title to the land. During the eligibility mission, the IRM could not establish whether informal business owners hold customary land rights. Further assessments during the compliance review mission would be needed to establish the legal nature of their claim to the sites.



Figure 3: Packaging and exporting of dried fish in the buffer zone of the Sendou Power plant.
Source: IRM

The Involuntary Resettlement Policy (2003) covers economic and social impacts associated with Bank financed projects involving involuntary acquisition of land or other assets which result in loss of income sources or mean of livelihood as a result of the project, whether or not the affected persons are required to move (see para. 3.4.1(c)).

The Involuntary Resettlement Policy states:

Para. 1: *“The Bank Group involuntary resettlement policy has been developed to cover involuntary displacement and resettlement of people cause by a Bank financed project and it applies when a projects results inassets being lost and livelihoods being affected.”*

Para. 3.4.1 (b) and (c):: *“This policy covers economic and social impacts associated with Bank financed projects ... which result in (b) loss of assets....or (c) Loss of income sources or means of livelihood as a result of the project.”*

Para. 3.4.2 further states that displaced persons in the following two groups are entitled to compensation for loss of land or other assets taken for the project purposes even for those who may not have formal legal rights to land or other assets at the time of the census but can prove that they have a claim such as land or assets that would be recognized under the customary laws of the country. If a customary right cannot be established, then para. 3.4.3 states that those who have no recognizable legal right or claim to the land they are occupying in the project area are entitled to resettlement assistance in lieu of compensation for land to improve their former living standards (compensation for loss of livelihood activities, common property resources, structures and crops, etc.) provided they occupied the project area prior to a cut-off date established by the borrower and acceptable to the Bank.

The IRM establishes that the Involuntary Resettlement Policy (2003) is applicable because the Sendou Power Plant Project will cause loss of income or means of livelihoods for the PAPs as they will have to give up their customary sites (the buffer zone) they use for drying and packaging fish. No alternative sites for these income generation activities were offered to them. Consequently, their livelihoods will be affected due to loss of income from these lands.

The IRM is of the view that a resettlement plan should have been prepared as more than 200 people have been affected. The Involuntary Resettlement Policy (2003) requires that a full resettlement plan be prepared for any project that involves a significant number of people who would need to be displaced with a loss of assets, or access to assets or reduction in their livelihoods.¹⁶ The policy defines “significant number of people” as follows:

“200 or more persons will experience resettlement effects. In addition to this numerical guidance, project planners and the Bank should also determine the ‘significance’ of a project by evaluating the severity of adverse impacts on disadvantage groups (for

¹⁶ See the Involuntary Resettlement Policy of the African Development Bank Group, (2003) Para. 3.4.6.

example, female headed households, the poorest, isolated communities, including those without title to assets and pastoralists). Any project that has adverse impacts on disadvantaged groups or ethnic, religious and linguistic minorities or which affects the poorest and most marginalized communities who do not have the capacity to absorb such impacts, should be considered significant, requiring a full resettlement plan.”¹⁷ For project for which the resettlement impact is small (i.e. less than 200 people) an abbreviated resettlement plan should be prepared.^{18”}

The Involuntary Resettlement Policy (2003) requires a comprehensive set of measures to be taken in the preparation of a resettlement plan. It requires the preparation of a socio-economic survey, an extensive consultation process with PAPs, and establish a monitoring process. While it is the task of the borrower to prepare the survey, the resettlement plan and to conduct the consultations, a strong role is assigned to the AfDB staff to guide and support the borrower in this process. Particular emphasis is given to meaningful consultations early on in the planning process.¹⁹ *“Displaced persons should be informed about their options and rights pertaining to resettlement. They should be given genuine choices among technically and economically feasible resettlement alternatives.”²⁰* Particular attention needs to be given to the disadvantaged groups.²¹ The AfDB Task Managers are called upon to give special attention to these consultation processes and to the extent to which the views of consulted groups are considered in the environmental and social management plan.²² A census survey to assess the size of the displaced persons and their socio-economic status, and consultation requirements with affected people, a description of compensation options and a discussion of these options, and monitoring implementation of the plan are also required for the abbreviated resettlement plans.²³

No resettlement plan has been prepared under the Project. The IRM did not find any evidence that the AfDB has alerted the borrower that a resettlement plan is required by the Bank. The Management Response only noted, that *“the project site was free of any occupancy. Therefore, not resettlement action plan was prepared by the project, since no PAPs existed that needed to be displaced or compensated.”* (see para. 56 Management Response). The IRM finds it difficult to understand why the resettlement impacts of informal workers conducting businesses on the buffer zone of the plant was not assessed.

In the ESIA the presence of women drying fish was noted and the construction of a fish drying facility proposed. There is no evidence available to confirm that consultations were conducted with the women and men who generate income from fish drying and packaging activities. The Management Response stated:

¹⁷ Ibid Para 3.4.6 footnote 16.

¹⁸ Ibid Para. 3.4.9.

¹⁹ Involuntary Resettlement Policy (2003) Para 3.3 (b).

²⁰ Ibid

²¹ Ibid Para 3.3 (c)

²² Ibid Para. 3.4.10 and Para. 4.1.3

²³ Ibid Annex B

“Fishery products processing site-- The area is used for artisanal fish drying, with removable structures in proximity to the power plant’s site. This is done without formal land rights. However, in consultation with the local community, including the mayor of Bargny, the Project Company is providing a custom-built fish drying facility as part of its Corporate Environmental and Social Responsibility (CESR). The new facility will offer the local population much better economic, health and environmental benefits. It will be located outside of the plant exclusion zone, to ensure the safety of the users. The Project Company (CES) is currently launching a feasibility study for the facility and has budgeted approximately USD50,000 to support its implementation, which will be completed prior to commencing the operation of the Plant.”²⁴

The IRM was informed during the eligibility mission that the intention is to set up such a facility. But no specific preparations had been made at least by November 2016. No site had been identified. It is therefore questionable whether a suitable location can be found, as the coast line is densely inhabited and the facility would need to be located in the proximity of Bargny harbor where the fish is unloaded and where women receive their fish supply. Moreover, the indication given to the IRM is that the facility which will be a modern infrastructure would accommodate only a limited number of women who presently dry fish.

Importantly, the measures proposed under the ESIA and presented in the Management Response might be suitable as environmental impact mitigation measures as required under the AfDB environmental policy but do not amount to compensation measures under a resettlement policy. Compensation measures and processes to be followed differ whether it is environmental mitigation measures or resettlement compensation measures that have to be followed. Under a resettlement policy, the group of affected people would have been determined and consulted and appropriate compensation measures should have been designed to compensate for negative livelihood impacts of all people affected by involuntary resettlement.

Assigned Plots to the Residents. The residents at Bargny argued that they had been assigned plots on the land where the Sendou power plant is located and inside the 500 meter security zone around the land. According to information received from the Requestors, more than 1000 plots have been allocated land within the site. The Requestors showed a map of these plots to the IRM mission. The plots had been allocated to the residents of the town of Bargny because of the threat of coastal erosion. The IRM observed that only a few houses have been built on these plots, and it was also informed that compensation was paid to the house owners. However, no compensation was paid to those who have not built on their allotted plots.

In explaining the nonpayment of compensation to owners of these plots, the representatives of SENELEC informed the IRM mission that no compensation needs to be paid to these people as they had not acquired any right to the land in the first place. They argued that the national regulations require the Government to re-acquire any allotted plot that has not been developed within a two (2) year time period. Subsequently, these plots were transferred back to government ownership. .

²⁴ The Management Response dated 26 September, 2016, Para 27.

This SENELEC position was rebutted by the complainants who claim to have firm rights to the plots and refer to documents issued to them by the authorities. The IRM eligibility mission was shown written notifications from the administrative authorities to some of the claimants informing the individuals about the number of the plot assigned to them. The notifications also indicated the fees which needed to be paid for the plot to be recorded in their name in the land registry. Some of the Requestors showed the IRM mission proofs of payments of the registration fee.

During its eligibility mission, the IRM could not establish the legal nature of the claim which these residents argue they have to the plots. The IRM, however, is of the view, that the nature of these claims should have been carefully assessed by the AfDB staff and a decision should have been taken whether the involuntary resettlement policy applies to the people who were already assigned plots. In documents reviewed by the IRM, no evidence could be found that such a review took place. If residents do hold a legal claim to the land, the Bank's Involuntary Resettlement Policy should apply under such circumstances particularly due to loss of asset as prescribed in Para. 3.4.1 of this Policy. The Management Response stated that no evidence is available that prior to transferring the land ownership to CES, relocation plans had been initiated for villagers who lived close to the seashore and that there is no documented agreement between the current mayors of Barny and Minam Villages, CES, SENELEC and other government officials on the validity of the allotted lands. In the documents reviewed, the IRM did not find any evidence that the legal nature of the allocation of plots to residents and the payment of fees for the registration of the property had been reviewed by the AfDB staff during the preparation process. The IRM thus does not agree with the dismissal of the affected people's claims by Management in its Response.

The IRM finds that there is prima facie evidence of non-compliance with the Involuntary Resettlement Policy (2003). A more detailed assessment needs to be undertaken during the compliance review to assess the legal nature of the claim of the PAPs to these plots. The importance to prepare a resettlement plan was also emphasized in the donor technical advisor's monitoring report on donor safeguard application which assessed the project's performance on environmental, social, health and safety issues. The report stated that preparation of a resettlement action plan was one of the highest priority items in 2014.²⁵

b. Non-compliance with AfDB Environment Policy (2004)²⁶

The *Requestors stated* that the plant will increase vulnerability of communities to air pollution and potentially disrupt the livelihoods because of the proximity of the coal power plant to the town's water supply, public facilities including an elementary school, a health center, a kindergarten and a cemetery. The *Management Response* mentioned that health risks from the power plant are adequately mitigated, that application of air quality standards are monitored, that impacts of the plant's cooling system are mitigated by a system design which would avoid

²⁵ See Monkeyforest , Assessment Report: Environmental, Social and Health & Safety, pages 8.

²⁶ The AfDB Environment Policy of 2004 is applicable as the project was approved in 2009 and the Integrated Safeguard Policy was only approved in 2013.

entraining small fish and that water discharged would not be higher than 3 degree Celsius above ambient water conditions. Management disagreed with the claim that there are adverse impacts of the coal power plant on an historic heritage site where the protected spirit of the village resides and that a nursery for the regeneration of marine biodiversity will be adversely impacted. Management stated that a baobab tree, which according to the residents represents the protected spirits of the village, will be kept undisturbed within the site of the project. Management also disagreed with the Requestors' assertion that the PAPs were inadequately consulted by the project. Management stated that public participation during the preparation of the ESIA constituted an important element of the project development and has been a key foundation of the project development from the outset. Management recognized that the communities are heavily impacted by the effects of coastal erosion which they claimed is not caused by the project, but that the plant location limits the possibilities of residents to relocate away from the coast.

The Sendou coal-fired plant has been categorized as Category 1 Project for potential adverse environmental impacts. An ESIA was issued in July 2009²⁷. A summary of the Environmental and Social Impact Assessment was distributed to the Board on 19 August 2009.²⁸

Para. 6.6 of the **Environment Policy (2004)** states:

“Category 1 projects will require a full Environmental and Social Impact Assessment (ESIA), including the preparation of an Environmental and Social Management Plan (ESMP).The ESIA examines the project's potential beneficial and adverse impacts, compares them with those of feasible alternatives (including the “without project “scenario) and recommends any measures needed to prevent, minimize, mitigate or compensate for adverse impacts and to enhance environmental and social benefits.”

The IRM finds that the ESIA did not adequately consider a number of important environmental impacts and did not present adequate mitigation measures for those impacts. The IRM found prima facie evidence on the following environmental impacts which were not adequately assessed:

(i) Transport of Coal from Dakar Harbor to Sendou Project Site.

The operation of the power plant requires 386,000 tons of coal. This coal is to be imported via 9 shipments, each of 43,000 ton capacity. Coal will be unloaded from the ship at Dakar harbor and transported by trucks to the project site. For each shipment of coal, 8600 tons will be unloaded per day. Assuming that each truck will transport around 30 tons of coal, there will be 287 one-way

²⁷ ADB/BD/2009/226, 19 August 2009, SENEGAL-SENDU Coal fired Power Plant Project, Environmental and Social Impact Assessment Summary.

²⁸ ADB/BD/2009/226, 19 August 2009, SENEGAL-SENDU Coal fired Power Plant Project, Environmental and Social Impact Assessment Summary.

truck movements daily for a period of about 5 days for each shipment. This means that during 45 days a year every day 287 trucks will transport coal from Dakar harbor to the project site and will return empty to the harbor to pick up another load of coal. This constitutes an exceptional heavy traffic of trucks travelling through very densely populated urban areas in Dakar. There will be significant noise and air pollution impacts coming from the truck traffic. Moreover, transport of coal on trucks through very densely populated areas could lead to serious health impacts if not adequately mitigated, while increasing the risk of accidents.

The ESIA does not assess the environmental impacts of the transport of coal from the harbor of Dakar to the project site. More recently, it has been decided that coal being transported by trucks from the harbor to the plant site will be covered. But this mitigation measure is hardly sufficient to protect the population from the impacts of coal and noise pollution and risks associated with heavy truck traffic. The donor technical advisor's monitoring reports on donor safeguard application, have highlighted the need to design mitigation measures on the transportation of coal to the site, the issue has been raised as a priority that must be addressed.

(ii) Coal Storage

A coal storage facility will be established at the eastern side of the Sendou power plant. It is located at the site closest to town of Bargny, i.e. closest to the settlement of people. The appropriateness of locating the coal storage facility on the project site closest to the town can be questioned. Moreover, the ESIA does not propose mitigation measures for the coal storage, such as ground water monitoring due to leachate, maximum heights, other protection of the coal storage area to reduce coal pollution and its impacts on health.

(iii) Ash Disposal Facility

The project is designed so that ash will be transported on a regular basis from the project site to the nearby cement plant. Only a very small facility has been provided for to store the ash. The assumption is that no longer term storage is needed as ash will be regularly removed and transported to the cement plant. The assumption that all ash will be purchased by the cement plant on a regular basis, is highly risky because it could lead to significant environmental impacts. Based on information available to the IRM, there is, as yet, no formal purchasing agreement between the Sendou Power Plant and the Cement Company to absorb all the ash to be generated by the Sendou power plant. Supposedly the agreement of purchase of ash will be contingent upon the quality of the ash. And even if such an agreement were signed, one cannot assume that all the ash will be regularly removed from the plant, because production delays, standstill at the cement plant, or other unforeseen situation might prevent the ash to be picked up. The construction of an adequate ash disposal facility which will prevent pollution of the air and ground is therefore essential. Moreover, adequate mitigation measures have to be provided for the transport of ash that will not create any accidents and health risks. The technical advisors monitoring reports on donor's environmental and social safeguards highlighted the need to prepare an ash disposal plan. According to information received by the IRM, such an ash disposal plan is not yet in place.

(iv) **Air Pollution**

The Requestors are concerned about health impacts resulting from air pollution of the Sendou plant. The management response stated that World Bank pollution standards have been applied to the project and disagreed with the assertion that health risks emerge from air pollution.²⁹ And that the Project company has commissioned a review and subsequent revision of the air emissions model to demonstrate compliance with the World Bank and Senegalese legislation applicable to the Project as the original model did not consider the final technology selected for the plant which is expected to be efficient and less polluting compared to the original one selected. The external monitoring reports point out a number of inconsistencies between standards applied and estimated pollution effects as the ESIA and the Air Quality Dispersion model refer to different results some of which are above the World Bank threshold levels.³⁰ Based on the comparisons done by the external monitors, the sulfur oxide (Sox) and nitrous oxides (NOx) values would be above World Bank standards.

Table 1: Comparison of Plant Emissions in Publicly Disclosed Documents. *Source:* Table 2.1 WSP Parsons Brinckerhoff, 09 May 2016, page 6.

Plant Emissions	Sulphur Dioxide (SO _x)	Nitrogene Dioxide (NO _x)	Carbone Monoxide (CO)	Particulates Dioxide (PM ₁₀)
Adopted Threshold ² World Bank Limits Thermal Power (2008)	1500 mg/Nm ³	510 mg/Nm ³	200 mg/Nm ³	50 mg/Nm ³
AfDB Non-Technical Summary (August 2009)	1,355 mg/Nm ³ (0.70% Coal S)	487.50 mg/Nm ³ (35% effective Low NO _x Burners)	200 mg/Nm ³	50 mg/Nm ³
ESIA (2009) Table 3.1	1,700 mg/Nm ³ (0.55-0.80% Coal S)	750mg/Nm ³	200 mg/Nm ³	50 mg/Nm ³
Fluidyn Ambient Air Quality Model, Plant Emission Input , Parameters, Oct. 2009	1,692 mg/Nm ³ (0.90% Coal S)	747 mg/Nm ³	199 mg/Nm ³	49 g/Nm ³

²⁹ See Management Reponse para. 57

³⁰ See Paras. 2.1-2.6 of WSP, Pearson and Brinckerhoff Report dated 09 May 2016.

The external monitors are concerned that the project may exceed the recommendation of the World Bank, where a single project should not contribute more than 25 % of the ambient air quality concentrations. However, details on ambient concentrations are not provided in the Ambient Air Quality Model. A final conclusion is thus not possible.

Table 2: Summary of Ambient Air Impacts and Respective Thresholds based on Ambient Air Dispersion Model (Fluidyn 200)), *Source:* Table 2.2 WSP Parsons Brinckerhoff, 09 May 2016 , page 7.

Calculated Ambient Air Quality Impact (Fluidyn 2009)	Sulphur Dioxide (SO _x) Annual Average	Nitrogen Dioxide (NO _x) Annual Average	Carbon Monoxide (CO) 24Hr Average	Particulates Dioxide (PM ₁₀) Annual Average/ 24Hr Average
Senegalese Threshold Norm Senegalese (NS) <i>Pollution Atmospherique</i> NS 05 – 062, Oct. 2003	50 ug/Nm ³	40 ug/Nm ³	30 ug/Nm ³	80 ug/Nm ^{8/} 260 ug/Nm ³
World Bank (2008) <25% Recommendation	12.5 ug/Nm ^{3*}	10 ug/Nm ³	7.5 ug/Nm ³	20 ug/Nm ^{8/} 65 ug/Nm ³
Modelled Ambient Air Concentrations, All data	44.69 ug/Nm ^{3*}	19.81 ug/Nm ^{3*}	5.25 ug/Nm ^{3*}	1.31 ug/Nm ^{8/} 14.59 ug/Nm ^{3*}
Modelled Ambient Air Concentrations, Worst Case Data	21.20 ug/Nm ^{3*}	9.39 ug/Nm ^{3*}	2.49 ug/Nm ^{3*}	14.59 ug/Nm ³ Not modelled

The external monitors in their respective reports mentioned that an updated model is under preparation but has not been completed. The monitoring reports systematically highlighted the urgency of this assessment. Based on the information received by the IRM, there is some evidence that the air emissions of the project might be out of compliance with the adopted World Bank standards, albeit – given the contradictory information in various reports and the lack of an updated air dispersion model, the IRM is not able to take a stance at this eligibility stage. The IRM will assess the updated model of the final technology selected during the compliance review.

(v) **Assessment of Marine Impacts.**

The design of the cooling water discharge system has not yet been finalized and thus a study on the thermal impact and related marine impacts are pending. The cooling water discharge system was originally designed as an open discharge system with cooling water to be discharged into the sea. Subsequently, the design was changed to a closed cooling system with evaporative towers. Based on information received by the IRM mission, the plant intends to discharge cooling

water into the sea. Supposedly, dispersal models for discharge are under preparation but no marine impact assessments have been planned. As the plant is expected to be operational by end of 2017, the fact that the design of the cooling water discharge system has not been finalized, and that marine impacts have not been assessed, is a matter of significant concern. The population of Bargny and the nearby fishing village depend to a significant extent on fishing. Release of warm cooling water at inappropriate levels might threaten the marine resources and further diminish fishing yields. Of particular concern is that the area around the plant has been designed as an area for fish breeding so that the fish stock – which over the last years has diminished due to overfishing – can be replenished. An assessment of impacts on this fish breeding area is of particular importance as fishing yields of local fisher had been reduced by overfishing from high sea fishing and efforts to rebuild the fish stock are of vital importance.

The ESIA in 2009 presented the findings of the thermal modelling exercise as designed at the time but did not provide any information on the marine impacts of release of cooling water into the sea and the impacts on the fish breeding grounds. The Management Response stated that impacts on fish will be limited as the temperature increases will remain within 3 degree Celsius above ambient levels, as the intake of fish will be minimized by protective devices built into the system and by restricting maximum flow velocity. Such design features are important but might not suffice to minimize impacts on the marine system. A marine impact assessment is required to assess impacts on the fish population prior to finalizing the design of the system.

The Management Response referred to the mitigation measures to be introduced into the cooling system and lists design features; but the IRM is puzzled by this response. The thermal model originally conducted as part of the ESIA was based on a different design for the cooling water discharge. At present, there is no thermal model and impact assessment available on the redesigned discharge system.³¹ The Management Response mentioned that *“An expert marine engineering consultancy has been contracted ... to design the marine-side of the plant’s cooling system....and an expert environmental agency ... has been contracted ... to review the thermal output in relation to environmental norms.”*³²

The IRM is concerned that the updated thermal model and marine impact assessment are not available in spite of the fact that construction of the open discharge system is expected to start soon and the plant is expected to go into operation by the end of 2017. Updated models and assessment of impacts need to be reviewed by the AfDB staff. Given the importance of the discharge of the power plant, the impact on the marine resources in the coastal area should be one of the key priorities for such review. Moreover, even if the discharge temperature will be in accordance with World Bank standards (maximum 3 degree Celsius above ambient water temperatures), the impacts on fish still needs to be assessed as the coastal area is a fish breeding ground and heavily used for fishing. The ESIA does not provide an impact assessment on the fish in the area but assumes that if the discharge system will comply with maximum temperature parameters laid out in the World Bank Prevention and Pollution Handbook, that there will not be an impact. For the population that depends so heavily on fishing in the same area where the power plant is being built, a marine impact assessment should be done.

³¹ This information is also provided in the report of the external monitor dated 09 May 2016 WSP Parsons Brinckerhoff Para. 2.10.

³² See the Management Response, 26 September 2016, Para. 55.

The need for such a marine impact assessment is also underlined in the report of the external monitor (technical advisor) in their report of May 2016. It states:

“It is noted that the surrounding villages of Minam and Bargny are highly dependent on fishing productivity for both sustenance and livelihood/income. It will be important that the construction of the seawater intake and thermal discharge pipework.....these adopted methods are to avoid or minimize impacts to the marine habitat, which may in turn impact fishing productivity (e.g. through noise, vibration and disturbances of sediment. It would be prudent to ensure that a sound understanding of the local fishing practices, such as yields, is obtained in order to measure potential impacts. Furthermore, the adopted methods and mitigation (e.g. compensation for reduced yields) is integrated within the community consultations, engagement and grievance mechanism.”³³

The significance of a healthy marine environment was highlighted in the ESIA when it noted in its section 4.2: *“The coastal demersal resources generally consist of high market value elements: shellfish (shrimps, lobsters and crabs), cephalopods (octopus, cuttlefish and squid) and fish (grouper, bream, red mullet, sole, Nile perch, surmullet, barracudas). Mainly intended for export, these resources are fraught with social, economic and political challenges in view of the relatively high incomes they generate to the fishing communities and industry. Overfishing, degradation of their natural habitats and the attendant erosion of the marine biodiversity constitute a threat to the continuity and economic viability of fishing activities.”*

(vi) Surface Water and Groundwater Impact

The Requestors fear that the plant will potentially disrupt the livelihoods because of the proximity of the coal power plant to the town’s water supply, public facilities including an elementary school, a health center, a kindergarten, cemetery, and to the site where over 1000 women and other seasonal and temporary workers process fish. The stakeholders met by the IRM mission voiced deep concerns about water availability and the risk of ground water contamination in the area when the plant enters into operation. Many questioned what would be the real impact on the long term of the discharge from the power plant on the marine environment and their livelihoods. Residents are concerned that by the power plant using significant quantities from the public water supply system, the already very constrained water supply to the residents would be heavily reduced.

³³ See Paras. 2:10 and 2.11 WSP Parsons Brinkerhoff, 09 May 2016

The Requestor's concern over the impact of the power plant on their water supply is a question not entirely addressed by the ESIA. The ESIA basically mentioned that water for the Sendou power plant will be supplied by the water distribution network of the Société des Eaux du Sénégal (SDE). Only an account is made of the water needed for the various processes in the plant and that water will be supplied from the city water supply system to a 5000 m³ reservoir. The water will be used for cooling, washing and cleaning. Sea water will be used for the cooling of the condenser. However, there is no indication as to whether the extra water need by the power plant can be fully met with the current water scheme that also provides water for the city and the industries in the area. The ESIA is silent on how the competing demands of water for the city and the power plant will be addressed.

In addition, the risk of ground water pollution are not fully established. The ash pond, the coal storage facility as well as wastewater produced on the facility will be the main sources of potential ground water pollution. However, the ESIA while analyzing the risks of ground water pollution resulting from the Sendou power plant gave a lengthy general description of the hydrology of the site its hydrogeology as well as the physicochemical characteristics of the ground water. However, no indication is provided about the power plant site specific information. Although this information is useful, it does not inform on how ground water will be monitored once the plant enters into operation. The information provided does not fulfill entirely the requirement of the Bank's Integrated Water Resource Management Policy (2000), which requires Management to ensure that adequate attention is paid to the protection of aquatic ecosystems.

(vii) Consultation Requirements

Para. 6.20 of the Environment Policy (2004) states:

"... All stakeholder have to be identified during the scoping stage of the ESIA and regularly consulted on the progress of the assessment. They will be kept informed of the results of the ESIA's and EMPs through formal channels and their reactions will be recorded."

Paragraph 28 of the Environmental Review Procedures for the Private Sector Operations of the African Development Bank, May 2000, provides that:

".....During the EA process for Category 1 projects....., the project sponsor is required to conduct meaningful consultations with relevant stakeholders including affected groups, Civil Society Organizations (CSOs) and local authorities about the project's environmental and social aspects and take their views into account. The project sponsor initiates such consultations as early as possible. For meaningful consultations, the project sponsor provides relevant information in a timely manner and in a form and language accessible to the groups being consulted."

Paragraph 29: *The project sponsor consults relevant stakeholders during the preparation of the EIA report to discuss with them the proposed project's objectives, description, and potential impacts. The project sponsor subsequently provides a non-technical summary of the report's findings after the draft EIA report is prepared for any additional consultations.*

Paragraph 30: *Following the public consultation on the draft EIA, the project sponsor supplements the EIA report by adding details of the public consultation process, and as necessary, including the project sponsor's responses to concerns raised by the various stakeholders and details of measures taken to incorporate these concerns into project design and implementation.*

Paragraph 31: *The project sponsor continues to consult with relevant stakeholders throughout project cycle construction and operations, as necessary, to address EIA related and other issues that affect them. The Bank requires the project sponsor to report on ongoing consultation as part of its annual reporting requirements.*

The Requestors complained about not having been adequately consulted. The Management Response stated “...From inception to date, public consultation with and disclosure of information to the project's stakeholder groups, including the PAPs, followed by a broad-based approach. From a socio-economic point of view, public participation during the preparation of the ESIA constituted an important element of the Project development and has been a key foundation of the Project from the outset.”³⁴

The ESIA records refer to a meeting held on 21 August 2008 which was attended by 20 residents. The main objective of the meeting was to inform the residents about the ESIA and to solicit their input. The residents expressed strong concerns about the location of the power plant in this area and recommended that it should be located in another site. There are no records of any other meetings conducted as part of the preparation of the ESIA. The Assessment Report Environment, Social and Health & Safety mentioned that the Communities *the communities* “feel that there was not enough advance consultation and communications from CES and the Government of Senegal”³⁵ This report considered the issue of communication of information about the project activities and its impacts a key priority

Since 2014, CES has intensified its consultation efforts and provided the IRM a list of consultation meetings conducted. Most of the meetings focused on issues of compensation or and allocation for residents who state that they had been allocated a plots within the site of the power plant. During the preparation of the ESIA, there are no indications that consultations were carried out with women drying fish as well as the rest of the communities with regard to the impacts of the project on the ecosystem. The monitoring report prepared by Parsons and Brinkerhoff suggested that such consultations should be undertake urgently³⁶ considering that they should have taken place during the preparation of the ESIA.

³⁴ See the Management Response dated 26 September, 2016, Para 42.

³⁵ Monkey forest Assessment Report: Environmental, Social and Health& Safety, September 2014, p. 13

³⁶ See Parsons & Brinkerhoff, Sendou 125 MW Power Plant, Senegal; Environment & Social Monitoring Report, Construction Phase Monitoring Report 003, August 2014.

Based on a review of the ESIA and records received by the IRM, consultations conducted during the preparation and on the ESIA were very limited. There was only one consultation meeting in August 2008 that the IRM was informed about. No records of other meetings are available. The IRM thus cannot agree with Management, that public consultations were conducted from the inception of the project. The IRM recognizes that there have been significant efforts in consultations since 2014, but that was after the completion of the ESIA and after the inadequate consultations were highlighted in the report of the external monitors. The IRM thus finds that there is prima-facie evidence that consultation requirements of the Environment Policy 2004 and the Environmental Review Procedures for the Private Sector Operations of the African Development Bank, May 2000 were not been adhered to. The IRM is particularly concerned that no consultations appear to have been conducted on the environmental resource impacts (for example impacts on fish yields and impacts on women and temporary workers working on the security area of the plant) which would adversely affect the livelihoods of the people living in the area.

6.2. Will non-compliance with the AfDB Policies and Procedures lead to Harm?

Para. 51 of the IRM Operating Rules and Procedures (2015) requires that non-compliance leads to harm or to a threat of harm. It states:

“...If the Director and the IRM Experts determine that there is prima facie evidence that the Requestors have been harmed or threatened with harm by a Bank Group-financed project and that the harm or threat was caused by the failure of the Bank Group’s staff and Management to comply with any of the Bank Group’s relevant policies and procedures...”

The IRM finds that there is threat of harm as a result of non-compliance with the AfDB policies. The Sendou project is not yet operational. Harm has not yet materialized but there is “threat of harm” as specified in Para. 51 of the IRM Rules. The non-compliance issues outlined above, will lead to harm once the 500 meter security zone will be closed, access of a large number of informal workers drying and packaging fish on their traditional sites will be denied resulting in income losses for those workers. Provided that the residents who have been allocated plots on the land of the power plant do have a right to these plots, they will be harmed as they cannot own and use these plots. Important environmental impacts, such as impacts of the release of cooling water into the sea and air pollution impacts have not been adequately assessed and there is thus a threat of harm on the marine system and the air quality. There is also likely harm resulting from coal dust and ash pollution. Of particular concern are the impacts resulting from the transport of coal from the Dakar harbor to the project site for which no adequate mitigation measures have been put in place. The IRM thus finds prima facie evidence that non-compliance with the AfDB Involuntary Resettlement Policy, the Environment Policy, the Integrated Water Resources Management Policy and the Environmental Review Procedures for the Private Sector Operations will likely lead to harm unless adequate mitigation measures have been set before the plant becomes operational.

7. Conclusion and Recommendations

This Eligibility Report finds prima-facie evidence for non-compliance with the following Bank Policies: (i) the Involuntary Resettlement Policy (2003), (ii) the Environment Policy (2004), (iii) and, (iii) the Environmental Review Procedures for the Private Sector Operations.

The IRM also finds prima-facie evidence that this non-compliance will likely cause harm, once the project will become operational. The conclusion of non-compliance with environmental and social safeguard policies is consistent with the findings of the external monitors which stated: *At present, the Project is not compliant with the Lender Requirements with regards to Environment and Social management and performance.*³⁷ The Director of CRMU and the IRM Experts thus recommend that a compliance review for the Sendou Project be authorized by the Boards of Directors.

In view of the findings of this eligibility report, the IRM recommends that the Boards of Directors approve the compliance review of the Sendou Coal Power Plant Project, including the budget and Terms of Reference (TORs) of the compliance review described in **Annex 6** of this report .

³⁷ See WSP Parsons Brinckerhoff, Para. 3.1, 0 9 May 2016

8. Annexes

Annex 1: Complaint by the First Requestors



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Bargny May 9 2016

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Responsable de la Conformité
Banque Ouest-Africaine pour le Développement (BOAD)
68, Avenue de la Libération Lomé, Togo
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Re: Complaint Sendou coal fired power plant, Senegal

Dear Mr. Priem and Mr. Touré,

First of all, Takkom Jerry¹ would like to express our satisfaction to present to you our complaint in relation to the Sendou coal fired power plant (hereinafter: Sendou project) in Senegal, financed by AfDB, BOAD and FMO. The project implementation started in 2013 without addressing the issues described in this complaint. These same issues were already raised during the public consultation on the Sendou project, which we therefore consider inadequate.

¹ Takkom Jerry is a member of the "Collective of affected communities", about 36 000 persons directly affected by the Sendou Project in Bargny and their associations, the (Khelcom fisherwomen association, landowners association, Federation of small-scale local fisheries CLP, SOS Bargny, and FII Sabillahahi).

Moreover, the lack of any agreement with the right-holders of these land titles, the absence of any compensation for the large majority and the lack of an agreed Resettlement Plan are a breach of AfDB, BOAD and FMO's environmental and human rights standards.

Secondly we are worried about air pollution and our health. Sendou is not the only polluting industry in the proximity of our village: the SOCOCIM cement factory, located at less than 2 kilometers from the Sendou project, is already affecting us. Next to Sendou, another even bigger coal-fired power plant providing 250 MW is being planned. There is no clear study establishing whether the cumulative impacts of these three plants poses any health risks.

We have raised these issues, and many more which are described in full detail in annex 1, with AfDB and FMO² but these negative impacts are still not adequately addressed at this moment and there has not been any adequate consultation with the communities until this day. Therefore we believe that this project is not in line with the AfDB, BOAD and FMO's environmental, social and human rights standards.

We would like to ask the Independent Complaints Mechanism of AfDB and FMO to undertake a compliance review and a problem-solving exercise. At the same time we would like to request BOAD's ICM to undertake a compliance review.

This complaint is technically supported by SOMO, Both ENDS, and Lumiere Synergie Developpement. We would like to request that any communication regarding this complaint is shared with our advisors Aly Sagne at Lumiere Synergie Developpement (alsagne@aim.com), Anna Floor van Ojik at Both ENDS (A.vanOjik@bothends.org) and Joseph Wilde Ramsing (j.wilde@somo.nl) at SOMO.

We look forward to your prompt reply to our urgent request.

Yours sincerely,

Mr. Ibrahima Diagne, President
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Mr. Aly Sagne
President
Lumière Synergie pour le Développement
BP: 279 - Escale - Fatick - Sénégal
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Email: alsagne@aim.com/ skype: fredsagne

² We refer to annex 2 for a complete list of our interactions with both development banks.

Representation Authority of the First Requestors

Bargny, le 8 juillet 2016

Objet :

Représentation des communautés affectées par le projet N° P-SN-F00-004 (centrale à charbon – Sendou/Sénégal)

Monsieur le Directeur du CRMU,

Par la présente, nous membres des personnes affectées par le projet de la Banque Africaine de Développement (BAD) cité en objet, attestons avoir donné mandat à M. Ibrahima Diagne, Président de Takkom Jerry sise à son siège de la rue Namory X Ndaak au quartier Finkone de Bargny du Sénégal pour nous représenter dans le processus de plainte engagé à l'encontre de la Banque Africaine de Développement (BAD).

Fait à Bargny le vendredi 8 juillet 2016.

Arame Ndour (Femme transformatrice produits halieutiques) , Tél. +221778099387

Pape Seck (Habitant Voisin direct), Tél. +221774909576

Ibrahima Sow (Berger) .Tel +221773837986

Fatou Seck (Mareyeuse et Détentrice de Parcelle) Tel + 221774395498

**AU REPRESENTANTS DU CRMU S/C
DE LA BANQUE AFRICAINE DE DEVELOPPEMENT**



« Plaider pour un monde plus ouvert »

Annex 2: Complaint by the Second Requestors

COLLECTIF DES COMMUNAUTES AFFECTEES DE BARGNY

Bargny, 12 July 2016

Mr. S. TOURE

Head of the Compliance Review Unit (CRMU)
African Development Bank (AfDB)
2nd Floor CCIA Building, Abidjan Plateau
Avenue Jean Paul II Côte d'Ivoire, crmuinfo@afdb.org

Mr. S. PRIEM

Complaints Office Nederlandse Financiering-Maatschappij
Voor Ontwikkelingslanden NV -POB 93060 -2509 AB the Hage
The Netherlands, complaintsoffice@fmo.nl

Compliance Officer

West African Development Bank (BOAD)
68, Avenue de la libération Lomé, TOGO, plaintes-conformite@boad.org

Subject: Complaint against the Sindou Coal Power Plant, Senegal

Dear Messrs. Touré and Priem,

Mr. Daouda GUEYE; Tel.: 221776342667, daoudalarry@hotmail.fr

Mr. CheikhFadel WADE; Tel.: 221776501372, cheikh.fadel01@gmail.com

Mandated by the Group of Affected Communities in Bargny, hereby submit a complaint concerning the Sindou Coal Power Plant Project in Senegal.

The project is financed by AfDB, BOAD and FMO, and the works started in 2013 without taking into account the problems described in this complaint.

In 2008, SENELEC applied for a 120 ha piece of land situated in Bargny for the implementation of a 125 MW coal power plant project, known as Sindou Power Plant 1. A BOO2 contract was signed on 24 January 2008 between the Government of Senegal and Nycombsynergeticsdevelopment AB, a Swedish lead company of a group of companies ("Compagnie sénégalaise d'électricité S.A." - CES).

The Government of Senegal declared the project of public utility by Decree No. 2009-849 of 3 September 2009, and allotted the 120 ha land to SENELEC for the construction of a power plant. The 120 ha land includes:

A 10 ha 30a 90 ca piece of land given on lease to HOLDING KEUR KHADIM company;

A 85 ha piece of land with two land certificates belonging to SCI LES COTTAGES DU CAP-VERT;

A 54 ha 43 a 77 ca piece of land with two plots (MINAM 1 and MINAM 2) allotted by Municipal Order No. 001/CB/SGM of 28 March 2006 and approved by Prefectural Order No. 056/DR of 5 April 2006 for the resettlement of Bargny and Minam people affected by the advancing sea and climate change, comprising 1,633 plots.

It was established that a portion of the land declared to be of public utility was allotted to CES for the construction of the coal power plant.

Curiously, CES bought 29 ha from the 120 ha land for CFAF 1.45 billion. The sale deed was approved on 14 October 2009 by the then Minister Delegate to the Minister of the Economy and Finance in charge of the Budget, Mr. Abdoulaye Diop, and co-signed by the Lands and Stamp Duty Registrar, Mr. Max Bidi Vincent, and the Manager of CES, Mr. Jean Claude NorlandSuzor. Paradoxically, the deed specifies that the plot should be taken from TF 475F, whereas this land certificate is not mentioned in the report that motivated President Abdoulaye Wade to issue a decree on the allocation of 120 hectares land to SENELEC. The land also includes an area for the processing of fishery products, known as Khelcom, which employs 1,000 women. On 28 February 2009, a public hearing was held in Bargny Town Hall, as part of the environmental impact assessment of the project to build a coal power plant in Bargny municipality. The objective of the interim report produced by Quartz Afrique consulting firm recruited for the assessment was to gather the views and concerns of the population in the town.

It was while waiting for the report that the Mayor of the town found out that the project implementation had started on the site several weeks earlier. Consequently, on 28 March 2011, the Mayor sent a correspondence (No. 060/CB/SGM) to the Prefect of Rufisque Department, with copies to the Director- General of SENELEC and the project developers to draw their attention to the fact that the site chosen for the project had been divided into two administrative layouts.

However, for several reasons, the Bargny communities and the then Mayor strongly objected to the implementation of the project. Indeed, the power plant is dangerous for the health of the population and ecosystems, and a poor decision had been taken to establish this dangerous and unhygienic power plant in the centre of Bargny in total disregard for the rules of the Environmental Code, which in its Article L13 states: "First class facilities (such as thermal power plants) should, before their construction or commissioning, obtain an operating permit ..., the permit shall ensure that the facility is at least 500 m away from homes, buildings usually occupied by third parties, institutions receiving the public, and dwelling areas, a stream, a lake, a means of communication, a water catchment ". It is clear from this provision of the Environmental Code that the distance of 500 m from homes (Miname 1 and Miname 2 plots), institutions receiving the public (Minam

health centre, the day care centre, the primary school, and the fish processing site) has not been respected.

The developers disregarded these provisions by establishing the coal power plant on a layout of 1,433 plots; the following are within 500 m radius from the power plant:

- The first houses on 206.51 m each;
- A health centre on 395.29 m;
- A primary school on 520.52 m;
- Secondary houses on the Sindou road on 266 m each;
- The Ngadjé- NdiagaSamb neighbourhood to the South-West on 494 m.

The project directly affects the human and economic rights of 1,000 women processing fishery products, who risk losing their jobs since the power plant is very close to the processing site; indeed, according to the regulations, a food processing unit should not be close to a property classified as dangerous and unhealthy.

The power plant significantly increases the air pollution levels already generated by the over 50 years presence of the cement factory (SOCOCIM) which pollutes the town environment with dust and gas, and through the mines.

Consequently, non-compliance with environmental, health, cultural and social standards through the establishment of a coal power plant close to the population and work places has become a serious threat to public health due to chronic inhalation of several toxic substances that in the long term often cause fatal lung diseases, risks of cancer, premature deaths, and birth defects, as well as constitute a major threat to the lives of the population of Bargny.

Considering the negative environmental and social impacts of the project;

Considering the inadequate public consultations;

Considering the high risks of the project to the population's health due to gas emissions, as well as air, water and soil pollution;

Considering the impacts on land use such as access to cemeteries, the primary school, the daycare centre, the health post, and the fish processing site, which are sensitive irreversible impacts that can lead to the loss of economic and social rights;

Considering that the project site is not appropriate due to non-compliance with the requirement to ensure a 500 m distance from:

A layout of 1,433 plots or houses already built, but not taken into account in the impact assessment;

A fishery products processing site, which is an important economic area for the town and its suburbs, and is very close to the coal power plant;

Homes that are very close to the coal power plant;

Expropriations have been conducted without fair and equitable compensation.

Considering the non-compliance with community rights to a healthy environment, as well as non-respect for cultural heritage (the Baobab tree where ancestors' rites are conducted is on the site of the power plant);

Considering that the Government's responsibility is fully committed by the Ministry of Environment which authorized, by Order dated 7 May 2010, the opening and operation of a dangerous, unhealthy or inconvenient establishment, classified in Category 1 class, without taking into account the fact that the Senegal Electricity Company (CES) did not comply with Article 13 of the Environmental Code;

Considering that the local climate change adaptation measures are now compromised because the site was expected to resettle over 300 families affected by coastal erosion, with 2-3 m coastal erosion per year;

Considering the threats to small-scale fishing and related activities that account for over 60% of the community's economic sector, which if no mitigation measures are taken, hot water from the power plant with toxic substances will be discharged directly into the sea in a protected biological area for marine species;

Considering the serious danger for the population created by the establishment of the coal power plant in an unsuitable and improper place;

We call on the independent inspection mechanisms of the AfDB, BOAD and FMO to undertake a compliance review on the site.

Yours sincerely,

Daouda GUEYE

A handwritten signature in blue ink, appearing to read 'Daouda Gueye', with a stylized flourish at the end.



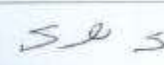





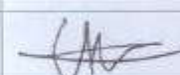



Cheikh Fadel WADE

A handwritten signature in blue ink, appearing to read 'Cheikh Fadel Wade', with a stylized flourish at the end.

Representation Authority of the Second Requestors

POUVOIR DE REPRESENTATION

Nous, soussignés en tant que faisant partie de personnes lésées par le projet de centrale au charbon de SINDOU autorisons messieurs Cheikh Fadel WADE et Daouda GUEYE à nous représenter et agir à notre nom pour déposer une plainte et d'en assurer le suivi pour la résolution de nos griefs auprès du Mécanisme indépendant d'inspection (MI) du groupe de la banque africaine de développement (AfDB).

Noms	Fonction	Adresse et contact	Signature
Fatou SAMBA	Présidente association des femmes transformatrices de Khelcom	Bargny NDIAGA SAMB TEL : 221774182701	
Cheikh FAYE	Président association SEUTOU MAME NDOGOL des propriétaires de terrains des lotissements Minam 1 et 2	Bargny NDIANDIA TEL : 221776583196 Mail : cheikhfaye1954@gmail.com	
Daouda MBODJ	Représentant collectif des pêcheurs	Bargny NDIANDIA TEL : 221776650047	
Daouda GUEYE	Responsable technique du collectif des communautés affectées	Bargny NDIANDIA Tel : 221776342667 Mail : daoudalarry@hotmail.fr	
Assane NDIAYE	Président du comité local de pêche (CLP)	Bargny NGOUNOU NDIAYENE TEL : 221775734146	
Cheikh Fadel WADE	Président association SOLIDARITE CI SUTURA coordinateur du collectif des communautés affectées	Bargny MBOTH TEL 221776501372 Mail : fadel.wade01@gmail.com	
Ndeye Yacine DIENG	Présidente association pour la valorisation de l'environnement et des côtes	Bargny NDIAGA SAMB TEL 221777771405	
Moussa DIA	Représentant des Eleveurs	Bargny NDIAGA SAMB TEL 221771180511	
El hadji Daouda GUEYE	Représentant des notables de Bargny	Bargny NDIANDIA TEL : 703088994	
Fatim SADJI	Représente des pratiquants du culte	Bargny GOUYE DIOULANCAR TEL : 773376950	
Ibra SECK	Chargé de la communication du collectif des communautés affectées de Bargny	Bargny NGOUNOU NDIAYENE TEL : 774547578 Mail : cassissmc@gmail.com	
El Hadji Maliek NDIAYE	Président des Acteurs du Littoral	Bargny Ndiandia Tel: 776317582	

Annex 3: The Management Response

AFRICAN DEVELOPMENT BANK GROUP



MANAGEMENT RESPONSE ON THE REQUEST FILED AGAINST THE SENDOU COAL-FIRED POWER PLANT PROJECT IN SENEGAL

8 September 2016

ACRONYMS

AFG	Advisory & Finance Group
AfDB	African Development Bank
BHEL	Bharat Heavy Electricals Limited
BOAD	Banque Ouest Africaine de Développement
CBAO	Compagnie Bancaire de l’Afrique de l’Ouest
CES	Compagnie d’Electricité du Sénégal SA
CESR	Corporate Environmental and Social Responsibility
CRMU	Compliance Review and Mediation Unit
DUP	Déclaration d’Utilité Publique
EPC	Engineering, Procurement and Construction
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FMO	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V.
GHG	Green House Gas
IACD	Integrity and Anticorruption Department
KEPCO	Korea Electric Power Corporation
MW	Mega Watts
NSD	Nykomb Synergetics Development, AB
PAPs	Project Affected People
PROMAC	Promac Engineering Industries
QP	Quantum Power
RMCs	Regional Member Countries
SENELEC	Société Nationale d’Electricité du Sénégal
SOCOCIM	Société de Cimenterie

INTRODUCTION

1. This note was prepared in response to CRMU's Notification of Registration of application No: RQ2016/2 dated 10th of August 2016 (the "**Request**"), following two referrals to verification of compliance on May 9, 2016 and July 15, 2016 respectively. The first request was initiated by two Civil Society Organizations (CSOs): Takkom Jerry and Lumière Synergie pour le Développement (referred to as the "**First Requesters**") on behalf of some Project Affected People (PAPs) and the second request was introduced by two individuals Mr. Cheikh Fadel Wade and Daouda Gueye (referred to as the "**Second Requesters**") on behalf of other members of the Bargny community.

2. Together the First and Second Requests contain eight separate charges, for which, CRMU, following a compliance verification mission, concluded that *"the assessment of the Request shows that it fulfills the requirements for registration under Paragraph 23 of the IRM Operating Rules and Procedures and has therefore registered it for compliance review, in line with the preference of the Requesters, pursuant to Paragraph 22 of the IRM Operating Rules and Procedures."* (Item 10 of the Request). Therefore, CRMU has asked Management to *"submit any evidence indicating how it has complied or intends to comply with the Bank's relevant policies and procedures applicable to this project"* (Item 12 of the Request). The Management Response Section addresses each of these charges.

BACKGROUND AND CURRENT STATUS OF THE PROJECT

3. The Sendou Coal-fired Power Plant Project was approved on 25 November 2009 by the Board of Directors as a senior loan of 55 million euros in favor of *Compagnie d'Electricité du Sénégal (CES)* to develop and maintain a 125 MW coal-fired power plant located 35 km from Dakar in Sendou, Senegal. The total Project cost stood at EUR 206 million. The Bank co-finances this, alongside BOAD, CBAO and FMO. The Project is being developed on a "build, own, and operate" basis and targets to supply up to 40% of Senegal's electricity, which currently derives 80% of its electricity from diesel-fueled power generation. The Government of Senegal (GoS) has outlined a strategy for diversifying and increasing domestic power generation capacity with a combination of conventional thermal base load and renewable energy.

4. The project implementation was only initiated following the first disbursement at the end of August 2013. The Sendou Power Plant project has subsequently experienced further implementation delays due to shareholder issues resulting in cost overruns. On 30 October 2015, the Board of Directors subsequently approved the new debt restructuring of the Sendou Power Project, to address the increased risk profile through: (i) an amendment to the existing loan terms; and, (ii) a provision of a supplementary Senior Loan Facility of 5 million euros.

5. The Project Company is Compagnie d'Electricité du Sénégal SA (CES), whose original sponsor is Nykomb Synergetics of Sweden. Late in 2012, AFG, an Investment Bank of Morocco joined as equity partner. In October 2015, Quantum Power acquired the equity interest of AFG and became joint equity sponsor with Nykomb. The construction of the power plant has been contracted out to two Indian companies: Bharat Heavy Electricals Limited (BHEL) and Promac Engineering Industries Ltd (Promac).

6. The new Project Sponsor, Quantum Power, took necessary measures to relaunch the construction of the power plant, and to secure additional equity needed to complete the Project

and start commercial operation. Construction resumed in January 2016 and the Project is now back on track, with a commercial operation date scheduled for the last quarter of 2017.

7. Senegal faces the dual challenges of growing demand for electricity and a desire to reduce diesel-based power generation. Accordingly, the GoS has emphasized that Coal-fired electricity generation is strategically important to the country, as efficient and affordable baseload to address these challenges.

PROJECT DESCRIPTION

8. The project aims at developing an Independent Power Producer (IPP) producing at least 925GWh of electricity per year. The power will be delivered to the national interconnected grid system of SENELEC, Senegal's only public electricity utility company.

9. The scope of the project includes the development, design, procurement, construction, operation and maintenance of a 125MW coal-fired power plant on a 22 ha site located 35 km south of Dakar, in Sendou (Bargny). In addition, the Project Company will develop the required infrastructure to handle, store, treat and transport the coal from Dakar port to the site.

ENVIRONMENTAL AND SOCIAL SUSTAINABILITY

10. The Project has been rated as Category 1 in accordance with the Bank's 2001 Environmental and Social Assessment Procedures (ESAP). Potential environmental impacts for this coal fired power plant include air emission impacts (SO₂, NO_x, CO, PM₁₀) on sensitive receptors (e.g. people, domestic animals, birds, wildlife, etc.), impacts of water usage and water cooling on the recipient water body (the ocean) and fisheries, marine organisms, etc., ash disposal (both fly and bottom) etc.

11. The Sendou Power Plant is required to comply with the World Bank's guidelines for all air emissions, associated with this project. It also met AfDB air emissions requirements in effect at the time of approval. This is justified by the fact that the tariff rate for the sale of electricity agreed between SENELEC and the World Bank is based on the standards of the World Bank. Consequently, the Government of Senegal, by a letter signed by the Minister of the environment, exceptionally, allows SENELEC to implement the guidelines of the World Bank on air pollution standards for strategic reasons, as this will be the first coal-fired power plant constructed in Senegal.

12. The physical, biological and human environment impacts of the Project have been thoroughly assessed. Potential physical impacts include contamination of surface and underground water, alteration of local air quality due to dust and exhaust gas emissions, noise pollution produced by site equipment and disturbance of natural ecosystems and deforestation. Mitigation measures include recovery of used equipment oil and reduction of spillage to a strict minimum, construction of site sanitary facilities, regular maintenance of machinery and vehicles to minimize exhaust gas emissions, raising works contractors' awareness of the need to limit noise and promotion of practices notably to prevent equipment failures and ensure machinery conformity with required standards. Regarding biological impacts, the possible impacts consist of, among others, water pollution due to evacuation of sanitary wastewater from the plant, thermal pollution of the sea through circulation of hot water from the power plant, alteration of

the air quality due to pollutants (NO_x, SO₂, CO₂), and contribution to climate change through GHG emissions.

13. To address specific environmental and social impacts, mitigation measures adopted include collection and treatment of the sanitary wastewater in order to restore its physical and chemical characteristics in line with the Senegalese wastewater standards, construction of an underground discharge pipeline to ensure adequate dispersal of the thermal plume, establishment of a station for the continuous measuring of SO₂ emissions and concentrations in the area, monitoring the wind direction and proximity of inhabited areas. The ash is intended to be used by the cement factory and the local brick manufacturing plant. In view of the proximity to densely urbanized areas (village of Bargny Minam), a health risk assessment was carried out through simulations of the dispersion of air emissions from the chimney of the power plant.

14. The objective of this study was to determine the concentrations averaged over the entire wind rose to determine the health impact on residents.

15. Because the plant is not yet in operation, it was possible in this study to vary certain parameters of the source term in order to maximize the impact of the installation on the air quality. The health risk assessment then carried out on the basis of the source term (chimney height of 100 m) indicates that toxicological reference values (TRV) are not exceeded either independently or when summed up by target organs.

16. Concerning the monitoring of project's environmental and social aspects, support is provided by an external technical adviser, Parson Brinckerhoff, who has been contracted to ensure quality construction of the various components of the project. With regard to the Environment and social aspects of the project, the lenders technical advisor role encompasses among others (i) reviewing the environmental & social management plans produced by the Engineering and Procurement Contractor (EPC) to ensure their adequacy and appropriateness, (ii) ensuring overall compliance of these plans, monitoring reports and other documentation with the environmental and social policies guidelines and standards of the Bank as well as national legislation and regulations, and (iii) assessing the social performance of the project and measures undertaken to minimize social risks and enhance social benefits for the surrounding communities.

17. Details of the Requesters' complaints and Management's response and action plan to address the complaints are discussed in the next section.

MANAGEMENT'S RESPONSE TO ISSUES RAISED BY THE REQUESTERS

18. Following the reception of the CRMU's notice of registration of Request No.: RQ2016/2 against the Sendou Coal-fired Power Project, ORQR, as the Lead Management's Response Coordinator, organized an internal review of the complaints, in conjunction with OPSD.4 and ONEC.3, in charge of project's implementation and provision of environmental and social safeguards support, respectively. Together, ORQR, ONEC and OPSD constitute the Management Response Team (MRT), in this case. The Team agreed on the following management's response to the issues raised and a plan of action on the way forward.

Unviability of Government's Coal-Power Policy Option

ISSUE STATEMENT #1— *Unviable government policy option to use coal-fired power plant for Senegal as the country does not produce coal and will be obliged to import it from the international market.*

19. Management disagrees with the Requesters' claim of the unviability of government's policy option to use coal-fired power plant for Senegal, because the country does not produce coal and will be obliged to import it from the international market. During the preparation of the project, the viability of the coal-based power generation has been assessed and was judged to be more practical compared to diesel-based power generation, on several grounds:

20. Firstly, it is worth noting that Senegal, whose power supply for many years has mainly been diesel-based, neither produces oil nor coal. In either case, the country will be obliged to import the power source from the international market, should it choose to do so. The only difference is that coal is cheaper than diesel and by implication coal-based power generation would be cheaper and deemed more sustainable to meet the growing national energy demand than diesel-based power generation.

21. Secondly, Senegal's power sector has been facing formidable challenges for a number of years, which has led to the inability of the *Société Nationale d'Electricité du Sénégal (SENELEC)* to meet peak demand since 2004. This translates into frequent load-shedding with blackouts or brown-outs experienced on a large proportion of days in the year (176 days in 2008). A number of industrial customers generate their own power using more costly diesel generators since they need reliable power supply and their demand has not been estimated. Thus, owing to its affordability, coal-based power generation is perceived to be an appropriate response to overcoming these challenges more effectively than that of diesel-based.

22. Lastly, the operation is expected to enhance long-term economic growth by increasing Senegalese infrastructure capacity and thus support foreign direct investment, job creation, service delivery, and reduced costs of doing business and trade. The main development outcomes are expected to stem from infrastructure development and specifically from the reduction in service interruption and additional capacity to satisfy the demand growth of 7 to 8% per year.

Violation of the National Environmental Code

ISSUE STATEMENT #2: *The selection of the project site violates Article L13 of the National Environmental Code, which regulates sites' selection for similar projects. Of concern, is the fact that the Sendou Power Plant is sited close to an already existing cement factory, located at less than 2 kilometers away and another coal-fired power plant, with larger capacity, is envisioned close to the same site.*

23. Management is not in agreement with the Requesters' claim that the National Environmental Code has been violated in the context of this operation for the following reasons:

24. Article L13 of the National Environmental Code states that facilities classified in environmental Category 1, High-risk operation, should be issued an environmental/operating permit by the Ministry of the Environment under the conditions set out by Decree 2001-282 of 12 April 2001, before construction or commissioning. This authorization is subject to observance of a 500 m buffer zone from dwellings, buildings usually occupied by third parties, habitations, watercourse, water catchment etc.

25. The operating permit was delivered to Compagnie d'Electricité du Sénégal (CES) on May 7, 2010 (*see Appendix 1 - Permis d'exploitation*). Accordingly, the 22 ha site is surrounded by a 500 meter security zone of about 81 ha protecting the habitations and establishments accessible to the public, in conformity with the environmental code of Senegal. The operating permit was delivered taking into account the existing Cement factory.

26. The construction of the larger capacity coal-fired power plant of 250 MW in Bargny has been called off. Both the GoS & the Korean company, KEPCO, have decided not to go ahead with its construction, contrary to initial plans.

Local Community's Health at Risk

ISSUE STATEMENT #3 *Increased vulnerability of communities to air pollution and potential disruption of livelihoods because of the proximity of the coal power plant to the town's water supply, public facilities including the elementary school, a health center, a kindergarten, cemetery, and the only fishery product processing site that employs about 1000 women and other seasonal workers.*

27. Management differs on the Requesters' accusation increased local communities' vulnerability to air pollution and disruption of livelihoods because of the proximity of the power plant to local water supply, public facilities and the fishery processing site. The power plant's perimeter is located at a distance of at least 500 m from human settlements and other public dwellings. In addition, the project has been designed not to interfere with local fishing activities. To fulfill this obligation, the Project is set out to engage in the following actions:

- *Fishery products processing site*— The area is used for artisanal fish drying, with removable structures in proximity to the power plant's site. This is done without formal land rights. However, in consultation with the local community, including the mayor of Bargny, the Project Company is providing a custom-built fish drying facility as part of its Corporate Environmental and Social Responsibility (CESR). The new facility will offer the local population much better economic, health and environmental benefits. It will be located outside of the plant exclusion zone, to ensure the safety of the users. The Project Company (CES) is currently launching a feasibility study for the facility and has budgeted approximately USD 50,000 to support its implementation, which will be completed prior to commencing the operation of the Plant.
- *Water intake* —The sea-water cooling system has been designed to avoid carrying small fish by restricting the maximum flow velocity of water intake in conformity with World Bank guidelines. It avoids the ingress of larger species by means of screening and all pipes will be buried to avoid disturbing the sea-floor.
- *Water Discharge*—Environmental considerations are incorporated into the cooling water intake and outfall systems, so as to minimize the impact of the plant on the local marine environment and fishing activities. On the outflow, a weir system will be constructed to minimize the differential between exit water velocity and tidal velocity. The outfall system has been designed to meet World Bank guidelines for the temperature of water discharged (a maximum of 3°C warmer than adjacent ocean temperature at a distance of 100 meters from the discharge point), considerably less than seasonal natural variations in water temperature (17-28°C).

Potential Adverse Impacts on Cultural Heritage and the Nursery for Marine Biodiversity

ISSUE STATEMENT #4— Adverse impact of the coal power plant on an historic heritage site where the protected spirit of the village resides and a nursery for the regeneration of marine biodiversity

28. Management disagrees with this claim. On the contrary, the preparation of the ESIA/ESMP report has taken on board cultural heritage issues of concern to the local community and mitigation measures were provided in the report. Further consultations with the same community during implementation revealed the cultural significance for the locals of a baobab tree growing within the project's site, as it represents the protected spirit of the village. This issue was unknown at the time of project appraisal and Board approval. The project Company is sensitive and values local cultural heritage. It has decided to keep it undisturbed and safe in accordance with the wishes of the local community. Locals do not require access to the baobab tree, they just want it protected, according to discussions held between them and the developer.

29. Regarding the nursery for the regeneration of marine biodiversity, it is important to note that the sea water cooling system has intentionally been designed to avoid entraining small fish. By design, the temperature of the discharged water is expected not to exceed the +3°C norm from the adjacent ocean temperature at a distance of 100 meters from the discharge point, which is considerably less than seasonal natural variations in water temperature (17-28°C).

30. Furthermore, water discharge from the Project cooling system is being assessed, to ensure compliance with the World Bank's requirements. An expert marine engineering consultancy, Royal Haskoning, has been contracted by the Project Company to design the marine-side of the plant's cooling system, which includes a requirement to consider environmental parameters in system design, and an expert environmental agency, Fluidyn, has been contracted to review the thermal output in relation to environmental norms. The cooling system design will be tailored to ensure compliance with the analysis performed by Royal Haskoning, Fluidyn, World Bank and Senegalese requirements on thermal water discharge. This is being closely monitored by the Lenders Technical Adviser.

Breach of African Development Bank's environmental, social and human rights standards

ISSUE STATEMENT #5 — Breach of African Development Bank's environmental, social and human rights standards since there was no agreement signed with the right-holders of land titles, and no compensation was paid to the large majority of these holders. In addition, no Resettlement Action Plan was prepared to mitigate the project's negative social impacts.

31. Management disagrees with this claim and would like to assert that from the time the ESIA was conducted until its completion, the project's site was free of any type of occupancy, therefore no resettlement action plan was prepared by the project, since no PAPs existed that needed to be displaced or compensated. The land belonged to SENELEC, who acquired it through a regular transaction.

32. Building on the results of the 2009 ESIA and on feedback from an independent consultant contracted to highlight significant issues raised in the ESIA, an Environmental and Social Management Plan ("ESMP") was prepared to mitigate any potential negative effect of the Project on the local environment. The ESMP provides a framework for the implementation and monitoring of the environmental and social management plan of the Project and is being regularly assessed by

the Lenders Technical Adviser. (See Appendix 7: ESMP). The following provides a historical perspective on the land transfer of the project's site from the early days of the country independence to date:

- The Government acquired the Site and the surrounding area in 1964. Around the year 2000, the Government designated about 5,800 ha of land including the Sendou Site as an industrial zone. On 26 November 2008, the Government of Senegal dedicated the Project Site to the activities of SENELEC (*See Appendix 2: Attestation d'enregistrement délivrée par la Direction Générale des impôts et des domaines*).
- Information disclosure: The process of registering the land in the name of the state was launched and as required by Senegalese law, the prospective land transfer was advertised in French, an official and widely spoken language in Senegal, in the official journal "*Journal Officiel de la République du Sénégal*", for six months.
- On September 3, 2009, the President of the Republic of Senegal signed Decree no 2009-849 of 3 September 2009, declaring the ownership of the land be transferred to SENELEC. 54 ha were assigned to SENELEC, a DUP was issued (Déclaration d'utilité Publique) (See Appendix 3: Decree 2009/849- the article 4). The Site was subsequently sold to Compagnie d'Electricité du Sénégal ("CES" - the Project Company). The land purchase deed, approved on 14 October 2009, specifies that the sole use of the Site will be for constructing a power plant (*See Appendix 4: Land purchase*).

Imminent health risks from air pollution due to the lack of cumulative impacts assessment of the combined effects of emissions from three plants in the same location

ISSUE STATEMENT #6 — *Imminent health risks from air pollution due to emissions from Sendou Power Plant, the cement factory and another coal-fired power plant with larger capacity of 250 MW which is scheduled to be built close to the same site. There was no cumulative impact assessment study prepared to measure the effects of emissions from these three plants.*

33. Management believes that the above claims are factually incorrect. As mentioned in point 2 above, both GoS and KEPCO, have renounced plans for the construction of a larger coal-fired power plant of 250MW close to the Sendou power station.

Air Pollution:

34. The ESIA specifies clear environmental standards and threshold limits as regards (i) air quality, (ii) noise and (iii) rejection of wastewater. Accordingly, prevention against the risks of air or water pollution is subject to a framework that regulates the discharge of wastewater and air emissions. The Senegalese standard NS 05-062 on the quality of air emissions sets limits for emissions as well as concentration limits of pollutants in ambient air. These limits are defined in the ESIA (*See Appendix 8 : Lettre N°00053/MEPNBRLA/CT.CM adressée au Ministre d'état, Ministre en charge de l'énergie*). Accordingly, the Project is designed to minimize air pollution using the following procedures:

1. Coal with very low Sulphur content
2. A more efficient burner
3. A NOx re-burner

4. An electrostatic precipitator to remove small particles from emissions
 5. A smokestack over 150 meters high to ensure the wide diffusion (rather than local concentration) of any remaining particulates.
35. Compliance with these environmental standards is being assessed by the Lenders' Technical Adviser during the construction phase. Compliance will also be rigorously assessed and reported on regularly during the operational phase of the Project.

Cumulative impact assessment study:

36. The Environmental Social Impact Assessment (ESIA) includes a Cumulative Impact assessment, which takes into account the cement factory (SOCOCIM) located about 2 km from the power plant. To bring the Project analysis fully up-to-date, the project company has commissioned a review and subsequent revision of the air emissions model to demonstrate compliance with the World Bank and Senegalese legislation applicable to the Project. Management recognizes that, the original model did not consider the final technology selection for the plant, which promises to be more efficient and less polluting than that which was initially envisaged; nor did it take into consideration the low-Sulphur coal content now preferred under the project. The updated model scope has been reviewed by the Lenders' Technical Adviser, and will consider the impact of the Project in isolation as well as in its local setting. The results will be available by the last quarter of 2016.

Increased Vulnerability of the local Community

ISSUE STATEMENT #7: *Increased vulnerability of the community to the consequences of coastal erosion.*

37. It has come to Management's attention that the coastal villages of Minam and Bargny experience high levels of coastal erosion, which in the case of Minam, has required relocation of the village on a number of occasions historically. Although the construction and operational phases of the power plant would not cause nor have direct effects on the natural coastal erosion. Relating the project to the issue at hand may arise in part from the possibility that local populations that have settled close to the seashore would, because of the project's siting, no longer have latitude to move upland from the eroded sides.

38. Allegedly, prior to transferring the ownership title of the project's site to CES, relocation plans had been initiated for villagers who lived close to the seashore, by the former mayor, due to concerns over encroachment of the seawater into occupied land. It is also alleged that 600 – 1,000 plots of land were committed, some of which are located within the project's site and many more are located within the 500m buffer zone. No evidence is available to date to support this statement. Moreover, it appears that there is no documented agreement between the current Mayor, Bargny and Minam Villages, CES, SENELEC and other government officials on the validity of the allocated parcels of land.

39. Following the resumption of the Project in January 2016, the New Project Management team initiated a dialogue with SENELEC and reiterated its support for SENELEC and the Government of Senegal to effectively address local issues in relation to the Land use. Although CES owns the land, it is the responsibility of the GoS to formally deal with the population regarding the Site. CES has committed to providing such indirect assistance as appropriate.

40. The Environmental and Social Impact Assessment states that in the event that a resettlement of populations is required, a resettlement action plan would be prepared and cleared by the relevant authorities. Furthermore, in the event that the project would cause the displacement of some populations, the GoS undertakes to compensate such populations at the level of the injury suffered by the latter in accordance with the provisions of the comfort letter N ° 005517/MEF provided to the lenders on 24 May 2013 (see Appendix 9: letter of comfort).

41. Management recognizes that there is an issue of vulnerability of members of the local community, with regards to encroachment of coastal erosion into their settlements. It takes strong interest in the issue and feels it has the moral obligation to endeavor seeking, appropriate and timely solutions, to resolve this problem, in conjunction with GoS, SENELEC, CES and other relevant stakeholders. Management is of the view that it is in the interest of the project to establish and maintain a good rapport with its surrounding communities throughout implementation and beyond.

Project-Affected People

ISSUE STATEMENT #8: *Inadequate Consultation with Project-Affected People (PAPs)*

42. Management strongly disagrees with the Requesters' assertion that the project inadequately engaged with the PAPs. From inception to date, public consultation with and disclosure of information to the project's stakeholder groups, including the PAPs followed a broad-based approach. From a socioeconomic point of view, public participation during the preparation of the ESIA constituted an important element of the Project development and has been a key foundation of the Project development from the outset.

43. An interactive method was adopted for conducting the ESIA, whose primary objective was to solicit and include the views, expectations and concerns of the different stakeholder and interest groups in the decision making process, particularly those residing in the project intervention areas. For the purposes of the ESIA, group interviews were carried out and discussions were held with all the stakeholders in the project. By undertaking a public hearing, the project developers also allowed the airing of the views of local authorities together with those of the local population. The process also benefitted from a series of meetings with local authorities, the PAPs of the municipality of Bargny, Yène, Sendou and Minam. Annex 10 provides a list of participants (Listes de Présence Bargny 1&2) to these meetings.

44. In August 2009, an environmental summary report was posted on the Bank's website, as well as in-country for a period of 60 days, as per the requirements of Bank's policies and procedures for category 1 projects. Until the filing of this Request, no objections were ever reported.

CONCLUSIONS

45. Management disagrees with the Requesters' claim of the unviability of government's policy option to use coal-fired power plant for Senegal, because the country does not produce coal and will be obliged to import it from the international market. During the preparation of the project, the viability of the coal-based power generation has been assessed and was judged to be more practical compared to diesel-based power generation, on several grounds:

46. Firstly, Senegal, whose power supply for many years has mainly been diesel-based, neither produces oil nor coal. In either case, the country will be obliged to import the power source from the international market, should it choose to do so. The only difference is that coal is cheaper than diesel and by implication coal-based power generation would be cheaper and deemed more sustainable to meet the growing national energy demand than diesel-based power generation.

47. Secondly, Senegal's power sector has been facing formidable challenges for a number of years, which has led to the inability of the Société Nationale d'Electricité du Sénégal (SENELEC) to meet peak demand since 2004. This translates into frequent load-shedding with blackouts or brown-outs experienced on a large proportion of days in the year (176 days in 2008). Thus, owing to its affordability, coal-based power generation is perceived to be a more appropriate and effective response to overcoming these challenges than that of diesel-based.

48. Lastly, the operation is expected to enhance long-term economic growth by increasing Senegalese infrastructure capacity and thus support foreign direct investment, job creation, service delivery, and reduced costs of doing business and trade. The main development outcomes are expected to stem from infrastructure development and specifically from the reduction in service interruption and additional capacity to satisfy the demand growth of 7 to 8% per year.

49. Management disagrees with the Requesters' claim that the National Environmental Code has been violated in the context of this operation. Indeed, Article L13 of the National Environmental Code states that facilities classified in environmental Category 1, High-risk operation, should be issued an environmental/operating permit by the Ministry of the Environment under the conditions set out by Decree 2001-282 of 12 April 2001, before construction or commissioning. In addition, this authorization is subject to observance of a 500 m buffer zone from dwellings, buildings usually occupied by third parties, habitations, watercourse, water catchment etc. The operating permit was delivered to Compagnie d'Electricité du Sénégal (CES) on May 7, 2010 (see Appendix 1 - Permis d'exploitation). Accordingly, the 29 ha site is surrounded by a 500 meter security zone of about 81 ha protecting the habitations and establishments accessible to the public, in conformity with the environmental code of Senegal. The operating permit was delivered taking into account the existing Cement factory.

50. The construction of the larger capacity coal-fired power plant of 250 MW in Bargny has been called off. Both the GoS & the Korean company, KEPCO, have decided not to go ahead with its construction, contrary to initial plans.

51. Management differs on the Requesters' accusation increased local communities' vulnerability to air pollution and disruption of livelihoods because of the proximity of the power plant to local water supply, public facilities and the fishery processing site. The power plant's perimeter is located at a distance of at least 500 m from human settlements and other public dwellings. In addition, the project has been designed not to interfere with local fishing activities. To fulfill this obligation, the Project is set out to engage in the following:

52. Concerning the fishery products processing site, it should be noted that the area is used for artisanal fish drying, with removable structures in proximity to the power plant's site. This is done without formal land rights. However, in consultation with the local community, including the mayor of Bargny, the Project Company is providing a custom-built fish drying facility, as part of its Corporate Environmental and Social Responsibility (CESR). The Project Company (CES) is currently launching a feasibility study for the facility and has budgeted approximately USD 50,000

to support its implementation, which will be completed prior to commencing the operation of the Plant.

53. With regards to the water intake, it is important to note that the sea-water cooling system has been designed to avoid carrying small fish by restricting the maximum flow velocity in conformity with World Bank guidelines. It avoids the ingress of larger species by means of screening, and all pipes will be buried to avoid disturbing the sea-floor. Regarding the water discharge, it should be noted that environmental considerations are incorporated into the cooling water intake and outfall systems, so as to minimize the impact of the plant on the local marine environment and fishing activities. On the outflow, a weir system will be constructed to minimize the differential between exit water velocity and tidal velocity. The outfall system has been designed to meet World Bank guidelines for the temperature of water discharged (a maximum of 3°C warmer than adjacent ocean temperature at a distance of 100 meters from the discharge point), considerably less than seasonal natural variations in water temperature (17-28°C).

54. Management disagrees with the claim of potential adverse impacts on cultural heritage and the nursery for marine biodiversity. On the contrary, the preparation of the ESIA/ESMP report has taken on board cultural heritage issues of concern to the local community and mitigation measures were provided in the report. Further consultations with the same community during implementation revealed the cultural significance for the locals of a baobab tree growing within the project's site, as it represents the protected spirit of the village. This issue was unknown at the time of project appraisal and Board approval. The project Company has decided to keep it undisturbed and safe in accordance with the wishes of the local community. Locals do not require access to the baobab tree, they just want it protected, according to discussions held between them and the developer.

55. Regarding the nursery for the regeneration of marine biodiversity, it is important to note that the sea water cooling system has intentionally been designed to avoid entraining small fish. By design, the temperature of the discharged water is expected not to exceed the +3°C norm from the adjacent ocean temperature at a distance of 100 meters from the discharge point, which is considerably less than seasonal natural variations in water temperature (17-28°C). Furthermore, water discharge from the Project cooling system is being assessed, to ensure compliance with the World Bank's requirements. An expert marine engineering consultancy, Royal Haskoning, has been contracted by the Project Company to design the marine-side of the plant's cooling system, which includes a requirement to consider environmental parameters in system design, and an expert environmental agency, Fluidyn, has been contracted to review the thermal output in relation to environmental norms. The cooling system design will be tailored to ensure compliance with the analysis performed by Royal Haskoning, Fluidyn, World Bank and Senegalese requirements on thermal water discharge. This is being closely monitored by the Lenders Technical Adviser.

56. Management refutes the claim that the project has breached Bank's environmental, social and human rights standards and asserts that, from the time the ESIA was conducted until its completion, the project's site was free of any type of occupancy. Therefore, no resettlement action plan was prepared by the project, since no PAPs existed that needed to be displaced or compensated. The land belonged to SENELEC, who acquired it through a regular transaction. Moreover, building on the results of the 2009 ESIA and on feedback from an independent consultant contracted to highlight significant issues raised in the ESIA, an Environmental and Social Management Plan ("ESMP") was prepared to mitigate any potential negative effect of the Project on the local environment. The ESMP provides a framework for the implementation and

monitoring of the environmental and social management plan of the Project and is being regularly assessed by the Lenders Technical Adviser. (See Appendix 7: ESMP).

57. Management rejects the claims of imminent health risks from air pollution to local communities for lack of cumulative impacts assessment of the combined effects of emissions from three plants in the same location to be factually incorrect. As mentioned above, both GoS and KEPCO, have renounced plans for the construction of a larger coal-fired power plant of 250MW close to the Sendou power station.

58. The ESIA specifies clear environmental standards and threshold limits as regards (i) air quality, (ii) noise and (iii) rejection of wastewater. Accordingly, prevention against the risks of air or water pollution is subject to a framework that regulates the discharge of wastewater and air emissions. The Senegalese standard NS 05-062 on the quality of air emissions sets limits for emissions as well as concentration limits of pollutants in ambient air. These limits are defined in the ESIA (See Appendix 8 : Lettre N°00053/MEPNBRLA/CT.CM adressée au Ministre d'état, Ministre en charge de l'énergie). Accordingly, compliance with new environmental standards (i.e., Coal with very low Sulphur content; a more efficient burner; A smokestack over 150 meters high to ensure the wide diffusion (rather than local concentration) of any remaining particulates etc.), to minimize air pollution, is being assessed by the Lenders' Technical Adviser during the construction phase. Compliance will also be rigorously assessed and reported on regularly during the operational phase of the Project.

59. The ESIA does include a Cumulative Impact assessment, which takes into account the cement factory (SOCOCIM) located about 2 km from the power plant. To bring the Project analysis fully up-to-date, the project company has commissioned a review and subsequent revision of the air emissions model to demonstrate compliance with the World Bank and Senegalese legislation applicable to the Project. Management acknowledges that, the original model did not consider the final technology selection for the plant, which promises to be more efficient and less polluting than that which was initially envisaged; nor did it take into consideration the low-Sulphur coal content now preferred under the project. The updated model scope has been reviewed by the Lenders' Technical Adviser, and will consider the impact of the Project in isolation as well as in its local setting. The results will be available by the last quarter of 2016.

60. Although the construction and operational phases of the power plant would not cause nor have direct effects on the natural coastal erosion, it has come to Management's attention that the coastal villages of Minam and Bargny experience high levels of coastal erosion, which in the case of Minam, has required relocation of the village on a number of occasions historically. Relating the project to the issue at hand may arise in part from the possibility that local populations that have settled close to the seashore would, because of the project's siting, no longer have latitude to move upland from the eroded sides. Allegedly, prior to transferring the ownership title of the project's site to CES, relocation plans had been initiated for villagers who lived close to the seashore, by the former mayor, due to concerns over encroachment of the seawater into occupied land. It is also alleged that 600 – 1,000 plots of land were committed, some of which are located within the project's site and many more are located within the 500m buffer zone. No evidence is available to date to support this statement. Moreover, it appears that there is no documented agreement between the current Mayor, Bargny and Minam Villages, CES, SENELEC and other government officials on the validity of the allocated parcels of land.

61. Following the resumption of the Project in January 2016, the New Project Management team initiated a dialogue with SENELEC and reiterated its support for SENELEC and the Government of Senegal to effectively address local issues in relation to the Land use. Although CES owns the land, it is the responsibility of the GoS to formally deal with the population regarding the Site. CES has committed to providing such indirect assistance as appropriate.

62. Management recognizes that there is an issue of vulnerability of members of the local community, with regards to encroachment of coastal erosion into their settlements. It takes strong interest in the issue and feels it has the moral obligation to endeavor seeking, appropriate and timely solutions, to resolve this problem, in conjunction with GoS, SENELEC, CES and other relevant stakeholders. Management is of the view that it is in the interest of the project to establish and maintain a good rapport with its surrounding communities throughout implementation and beyond.

63. Management strongly disagrees with the Requesters' assertion that the project inadequately engaged with the PAPs. On the contrary, from inception to date, public consultation with and disclosure of information to the project's stakeholder groups, including the PAPs, followed a broad-based approach. From a socioeconomic point of view, public participation during the preparation of the ESIA constituted an important element of the Project development and has been a key foundation of the Project development from the outset.

64. An interactive method was adopted for conducting the ESIA, whose primary objective was to solicit and include the views, expectations and concerns of the different stakeholder and interest groups in the decision making process, particularly those residing in the project intervention areas. For the purposes of the ESIA, group interviews were carried out and discussions were held with all the stakeholders in the project. By undertaking a public hearing, the project developers also allowed the airing of the views of local authorities together with those of the local population. The process also benefitted from a series of meetings with local authorities, the PAPs of the municipality of Bargny, Yène, Sendou and Minam. Annex 10 provides a list of participants (Listes de Présence Bargny 1&2) to these meetings.

65. In August 2009, an environmental summary report was posted on the Bank's website, as well as in-country for a period of 60 days, as per the requirements of Bank's policies and procedures for category 1 projects. Until the filing of this Request, no objections were ever reported on the project.

FURTHER ACTION

66. Management recognizes that there is an issue of vulnerability of members of the local community, with regards to encroachment of coastal erosion into their settlements. It takes strong interest in the issue and feels it has the moral obligation to endeavor seeking, appropriate and timely solutions, to resolve this problem, in conjunction with GoS, SENELEC, CES and other relevant stakeholders. Management is of the view that it is in the interest of the project to establish and maintain a good rapport with its surrounding communities throughout implementation and beyond.

Annex 4: Program of the Eligibility Assessment Mission

IRM ELIGIBILITY MISSION TO DAKAR, SENEGAL REQUEST RELATING TO THE SENDOU COAL FIRED POWER PLANT 24-30 NOVEMBER 2016

Date & Time	Institution	Meeting/Activities	Location
24 Nov, 2016 Thursday		Arrival of Mrs Arntraud HARTMANN IRM Expert, in Dakar, Senegal	Airport Pick-up to Hotel Novotel
	Mrs. Arntraud Hartmann	Meeting with FMO's Representative: Maartje van Putten, Michael Windfuhr and Steffen van der Velde	Dakar
25 Nov, 2016 Friday	Mrs. Arntraud Hartmann & FMO's Representatives	Meeting with Mariline Diarra, Directorate for Environment and Settlements, Ministry of Environment	Dakar
	Mrs. Arntraud Hartmann	Meeting with Mamadou Gaye, Directeur technique Quartz-Afrique	Dakar
25 Nov, 2016 Friday		Arrival of Mr. Mr. Mafing KONDE, IRM Expert in Dakar, Senegal.	Airport Pick-up to Hotel Novotel
26 Nov, 2016 Saturday		Arrival of Mr. Sekou TOURE , Director of CRMU in Dakar, Senegal	Airport Pick-up to Hotel Novotel
	Field Visit		
12.00-2.00pm	Requestors	Meeting with Fadel Wade and Daouda Gueye, Second Requestors and other PAPs.	Bargny
3.00pm-4.30pm	Requestors	Meeting with Ibrahima Diagne , President of Takkom Jerry and Representative of Some PAPs (First Requestors)	Bargny
28 Nov, 2016 Monday	Field visit and Meetings		
7.00-8.00am		Travel from Dakar to the Project Site	

8.00am-9.30am	SENDOU	Visit of the project site-- Compagnie d'Électricité du Sénégal (CES)-(project promotor)	Sendou Power Plant
10.00-12.00noon	SENDOU	Panel visit to the area surrounding the project areas	Bargny
1.00pm-2.00pm		Lunch	
5.00pm - 7.00pm	Mayor and the new committee	Meeting with Mayor of Bargny and the new committee set up	City Hall, Bargny
7.00pm-8.00pm		Travel back to Dakar	
29 Nov, 2016 Tuesday	Meetings		
8.15am-8.40am	AfDB	Courtesy call on Res. Rep, SNFO	SNFO
8.45am-9.30am	AfDB	Meeting with the Task Manager	SNFO
10.00am-11.00am	Ministry of Finance	Meeting with the Secretary General or the Director of cabinet.	Ministry Building
12.00-1.00pm	Ministry of Environment	Meeting with Secretary General	Ministry Building
12.00-1.00pm		Lunch	
3.00pm- 5.00 pm	SENELEC	Société National d'Électricité du Sénégal (SENELEC)	Radison Hotel
5.00pm- 5.45 pm	Ministry of Energy	Meeting with Secretary General or the Director of cabinet of the Ministry	Ministry Building
30 Nov, 2016 Wednesday	Meetings		
9.00am-9.30am	AfDB	Debriefing with Res. Rep/Task Manager, SNFO, (optional)	SNFO
10.00-11.30am	AfDB	Briefing Session with Staff at SNFO on the Mandate and Role of the IRM	SNFO
1.00pm-2.00pm		Lunch	
Afternoon		Departure of IRM Team from Dakar (Mr. Mafing KONDE, Mr. Sekou TOURE, Mme Arntraud HARTMAN)	Hotel drop to Airport

Annex 5: List of People Met during Eligibility Assessment Mission

INDEPENDENT REVIEW MECHANISM

LIST OF PEOPLE MET DURING SENDOU ELIGIBILITY MISSION IN SENEGAL

24-30 November 2016

No.	Name	Institution	Contact
1.	Mrs. Mariline Diarra	Ministry of Environment, Department of Environment and Classified Entities	+221776399631 marilinediarra@yahoo.fr
2.	Mr. Mamadou Gaye	Technical Director, Quartz- Afrique	TEL/FAX: +221 338279277/706375759
3.	Mr. Cheik Fadel WADE	Association Solidaritici SUTURA	
4.	Mr. Daouda GUEYE	Leader of the Affected communities	
5.	Mrs. Fatou SAMBA	President of the Transformers Women (KHEKOM-BARGNY)	Tél. +221 7686611475 E.mail :fatou sambal@hotmail.com
6.	Mrs. Ndeye Yacine DIENG	President, Association for the development of the environment and coasts	Tél. +221 777771405 +221 706428153
7.	Mr. Assan N'DIAYE	President, Committee of local fishers (CLP)	Tél: +221 775734146 +221 709735546
8.	Mr. Cheikh FAYE	President, Association Gety Mame Ndogol, Representative of Land owners	Tél: +221 776583196 +221 709735546
9.	Mr. Ly Seck	Mayor of Bargny	
10.	Mrs. Ndiaye Ramatoullaye Dieng	Secretary General, Ministry of Environment	Tel. 221 77 33 31381 email: rahmadieng@yahoo.fr ; rahmadieng@environnement.gouv.sn
11.	Mr. Cheik Tidiane Diop	Secretary General, Ministry of Finance	
12.	Mr. Issa Dione	Director of the Large Production Project, SENELEC.	
13.	Mr. Gora Lo	Director, Legal Affairs, SENELEC	
14.	Mr. Pape Toby Gaye	Manager, SENELEC	
15.	Mr. El Hadji Mamadou Moussa Thiam	Permanent Secretary, Ministry of Energy and Renewable Energy Development	
16.	Mr. Mor Ndiaye Mbaye	Chief of Staff, Ministry of Energy and Renewable Energy Development	

Annex 6: Draft Terms of Reference and Estimated Budget for the Compliance Review

TERMS OF REFERENCE

COMPLIANCE REVIEW

THE CONSTRUCTION OF A 125 MW COAL SENDOU POWER PLANT IN THE VILLAGE OF BARGNY MINAM IN SENEGAL

1. Introduction

The CRMU received two complaints relating to the Sendou Power Plant Project in the village of Bargny Minam in Senegal. This project was approved by the Boards of Directors of the African Development Bank Group on 25 November 2009. The First Request was submitted on 09 May, 2016 on behalf of some of the PAPs by Takkom Jerry, and Lumière Synergie pour le Développement. These are two Civil Society Organizations (CSOs) based in Senegal, (hereinafter referred to as, “the First Requestors”). The Requestors asked the CRMU to handle their complaint through both problem-solving and compliance review. During the preliminary review of this Request, on 15 July 2016, the CRMU received the Second Request sent by two individuals, Mr. Cheikh Fadel Wade and Mr. Daouda Gueye on behalf of some other members of the communities in Bargny (hereinafter referred to as “the Second Requestors”), challenging the representational authority of the First Requestors to act on behalf of all the people negatively affected by the project (PAPs). The Second Requestors asked for a compliance review of the project. Needing clarity as to who the complainants were, the CRMU carried out a preliminary assessment, including a field mission to Senegal and established that both Requestors fulfilled the requirements stipulated in Paragraph 14 of the IRM Operating Rules and Procedures by providing CRMU with written signed proof that they have authority to act on behalf of some of the PAPs. The First Requestors also confirmed their desire to see their request handled through compliance review.

The two Requests raised several issues with regard to the negative impacts of the Sendou Coal Power Plant (hereinafter the “Sendou Project), including (i) inadequate public consultations with PAPs; (ii) breach of the African Development Bank’s environmental, social and human rights standards since there was no agreement signed with the right-holders of land titles, and no compensation was paid to the large majority of these owners; (iii) no Resettlement Action Plan was prepared to mitigate the project’s negative social impacts, (iv) the increased vulnerability of communities to air pollution and potential disruption of their livelihoods because of the proximity of the coal power plant to the town’s water supply, public facilities including the elementary school, a health center, a kindergarten, cemetery, and the only fishery product processing site that employs about 1000 women and other seasonal and temporary workers; (v) health risks from air

pollution due to emissions from the Sendou plant, the cement factory and the other coal-fired power plant planned close to the same site, with no cumulative impact assessment study prepared to measure the effects of emissions from these three plants; and (vi) the increased vulnerability of the community to the consequences of coastal erosion.

Since the two complaints relate to the same project and raise similar issues, the Director of the CRMU decided to combine them into one Request and keep the Requestors engaged separately in the process. After the preliminary assessment of the two complaints, the CRMU determined that the Requests fall within the mandate of the IRM and meet the registration criteria set out in the IRM Operating Rules and Procedures. It registered the complaint on 05 August, 2016 for compliance review. The Bank Management Response to the Request was submitted to the CRMU on 04 October, 2016 instead of 06 September, 2016 as indicated in the Notice of Registration of the Request.

In accordance with Paragraph 50 of the IRM Operating Rules and Procedures, the Director of CRMU and two members of the IRM Roster of Experts undertook an eligibility assessment mission to Senegal from 24 to 30 November, 2016 and prepared an Eligibility Report for consideration by the Boards of Directors of the Bank Group. The present Terms of Reference (TORs) for compliance review is submitted together with the Eligibility report to the Boards of Directors.

When approved by the Boards of Directors, the Compliance Review Panel is expected to conduct an independent review within the established framework of the IRM Operating Rules and Procedures of 2015. The Terms of Reference (TORs) provides specific guidance for the compliance review of the project. They include the scope of work, procedures, time-frame, conditions, budget, prerogatives and limitations of the Compliance Review Panel and are enclosed for your consideration.

2. Scope of Work for the Compliance Review Panel

The assignment of the Compliance Review Panel (hereafter “the Review Panel”) is governed by both the IRM Operating Rules and Procedures of 2015 (hereinafter the “IRM Rules”) and the relevant Bank Group policies and procedures. In this respect, the Review Panel will:

- (i) Assess the alleged non-compliance of the Sendou Project with the relevant Bank Group policies and procedures as a result of which the people and the environment may be adversely affected in a direct and material way.
- (ii) Prepare a Compliance Review Report containing their findings and recommendation for consideration by the Boards of Directors of the Bank Group.
- (iii) Recommend actions that are likely to remedy the problems, propose modifications to the Bank policies and procedures in order to avoid the recurrence of similar harm in the future,

propose changes in the scope or implementation of the Bank Group-financed project, subject to consideration of any restrictions or arrangements already committed by the Bank or any other relevant party in existing project-related agreements; or propose any remedial action to be taken by Management and to ensure independent monitoring of the implementation of the recommended remedies.

3. Procedures of Undertaking the Compliance Review

Upon approval by the Boards of Directors to undertake the Compliance Review, the Review Panel will:

- (i) Determine the methods of conducting the compliance review that from the outset appear to be the most appropriate, taking into account the nature of the Request.
- (ii) Determine if there is need to engage Specialists during the review, and if so, the qualifications and experience required of such specialists.
- (iii) Prepare an initial schedule for conducting the review, including the ways of gathering information, conducting interviews with Bank staff and other stakeholders.
- (iv) Take the necessary steps in presenting and translating the findings and recommendations of the Compliance Review Report prepared by the Review Panel for distribution to the Boards of Directors and the Bank Management for preparing a Response and an Action Plan.

4. Time-frame of Compliance Review

The proposed duration/ time-frame of the Compliance Review shall not exceed **two (2) months** from the date of commencement of the compliance review. The total input in terms of time of the Experts on the Review Panel shall not exceed **thirty (30)** working days as follows:

- (i) Ten (5) days for each of the Experts on the Review Panel to conduct desk review, interviews and to compile other necessary data at the Bank Headquarters in Abidjan.
- (ii) Ten (10) days for each of the Experts on the Review Panel to conduct a field visit to Senegal to interview the Requestors and other affected people, the project implementers, sponsors and Bank staff in Bank Country Office in Senegal (SNFO) and other stakeholders, including a visit to the project site.
- (iii) Twenty (15) days for each of the Experts on the Review Panel for conducting the related research, drafting and reporting.

5. Conduct of the Compliance Review Panel

Taking into account the nature of the Request, the Review Panel will, among other things:

- (i) Conduct the compliance review in accordance with the Terms of Reference to be approved by the Boards of Directors and within the required time frame.
- (ii) Review all documents relevant to the project along with the relevant Bank Group's policies and procedures.
- (iii) Meet with the Bank Management and Staff to solicit additional information, if necessary.
- (iv) Meet with the Requestors, affected people, Government officials, project sponsors, and representatives of Governments institutions (e.g. Société National d'Electricité du Sénégal (SENELEC)) and other stakeholders as considered relevant.
- (v) Visit the project site.
- (vi) Hold meetings with the project affected people (PAPs) and any other interest parties in the project area.
- (vii) Request written or oral submissions on specific issues from the Requestors, affected people, independent specialists, government or project officials, Bank staff, or other relevant stakeholders.
- (viii) Take any other action as may be required to complete the compliance review within the required time frame and approved budget.

6. Conditions

(i) Confidentiality

The Review Panel will undertake the compliance review of project in a transparent manner.

The Panel will handle and /or use any document in accordance with the Bank Group Policy on Disclosure and Access to Information.

(ii) Independence

The Review Panel will be neutral in its discussions and interviews with the Requestors, the Bank Management, Staff and other stakeholders. The Review Panel will always bear in mind that the focus of the review is the Bank Group's compliance with its own policies and procedures applicable to the Sendou Project.

(iii) Information Release

The Review Panel will:

- (i) Ensures that all interested parties in the project understand the objectives of the Compliance Review.
- (ii) Maintain open communications with all the parties involved including the Requestors and other affected people, project sponsor, government officials and all other relevant governmental and non-governmental institutions and local communities.
- (iii) Notify the Requestors of any new material facts provided by Bank staff, or authorities in Senegal, and vice versa.
- (iv) Contact, during the field visit, all concerned parties and pay due diligence in their contacts with the media or any other party to maintain its neutrality.
- (v) Decline to release information to any party if it deems that it will circumvent the independence of the Compliance Review Panel or may directly affect the image or interests of the Bank Group, the Borrower and the Requestors.
- (vi) Accept any supplementary information collected during the course of the review or provided by a member of the public either directly or through the Bank Country Office in Mali, if found to be credible and relevant to the Compliance Review.

7. Limitations

- (i) The Compliance Review Panel shall not review matters considered as limitations under Paragraph 2 of IRM Operating Rules and Procedures.
- (ii) Under Paragraph 60 of IRM Rules, the Review Panel should not recommend the award of compensation to the Requestors or any other person beyond that which may be expressly contemplated in a relevant Bank Group policy.
- (iii) In the event that the Review Panel encounters information related to fraud or corruption, the matter shall be reported to the responsible entity of the Bank Group and will use the rules established by the Bank Group to regulate such issues.

8. Panel Deliberations

According to the Paragraph 58 of the IRM Rules, the Review Panel should aim to reach a consensus of opinion on all decisions. If a consensus cannot be reached, all the opinions shall be reported to the Boards of Directors. This will enable the Boards to take into account all the views expressed on the matter by the IRM Experts.

9. Compliance Review Report

Within thirty (30) business days of completion of its investigations, the Review Panel shall report its findings and recommendations in a Report in English and French to the Boards of Directors of the Bank Group. The Review Panel shall:

- a. Prepare a draft compliance review report containing the Panel's findings and recommendations. The Report shall be submitted to Bank Management for comments and validation of factual issues only.
- b. The Bank Management shall submit its comments to CRMU/IRM within twenty-one (21) business days from the date of receipt of the draft report from CRMU.
- c. Upon receipt of comments from Bank Management, the Review Panel shall finalize the report ("Compliance Review Report"), which shall:
 - (i) Include a summary discussion of the relevant facts.
 - (ii) Set out the findings which shall be limited to determining whether or not any action by the Bank Group, or failure to act, in respect of the Sendou Coal Power Plant Project has involved one or more material violations of applicable policies and procedures.
 - (iii) If the Review Panel concludes that any Bank Group action, or failure to act, in respect of the Sendou Project has involved one or more material violations of policies, the Panel shall recommend:
 - Any remedial changes to systems or procedures within the Bank Group to avoid a recurrence of such or similar violations;
 - Any remedial changes in the scope or implementation of Sendou Project, subject to consideration of any restrictions or arrangements already committed by the Bank Group or any other relevant party in existing project-related agreements; and/or
 - Any steps to be taken to monitor the implementation of the changes referred to in the (i) and (ii) above, and the person in charge of such monitoring (who shall be the Director of CRMU and one of the IRM Experts) so appointed unless the Boards decide otherwise.
- d. The Compliance Review Report should include in its attachments, a copy of the original request, the response of the Bank Management and a list of supporting documents relied upon in the compliance review

10. Submission of the Compliance Review Report

The Director of CRMU will submit the Compliance Review Report to the Boards of Directors for consideration and decision. A copy of the Report will also be submitted to the President.

11. Publicity of Decision

CRMU will publish a summary of the decision made by the Boards of Directors on the website of the Bank Group.

COST ESTIMATE/BUDGET

The following is the Budget proposed for the compliance review of the Construction of a 125 Mw Coal Sendou Power Plant in the Village of Bargny Minam in Senegal

Type of Expense	Unit	Unit Cost (USD)	Number of Days	Number of Experts	Total (USD)	Total (UA)
Fees Lead Expert*	Days	1550	21	1	32,550	24,087
Fees Contributing Expert**	Days	1550	12	1	18,600	13,764
Review Expert	Days	1550	2	1	3,100	2,294
Subtotal Fees					54,250	40,145
Expert mission cost (DSA)	Days	258	7	2	3,612	2,673
Flight	Flt	8000	1	2	16,000	11,840
Subtotal Mission					19,612	14,513
Contingency					2000	1,480
Total					75,862	56,138

* 7 days, mission and 14 working days

**7 days, mission and 5 working days

1 USD = 0.74 UA