IRM - CRMU

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Country – Uganda
Requesters – Ugandan National Association of Professional Environmentalists (NAPE) and other local organizations
Concerns –environmental impacts; cumulative impacts; climate change; information, consultation and participation; compensation and resettlement; indigenous people; cultural and spiritual issues; dam safety
4 Jun. 2007: Request registered for a compliance review
7 Sep. 2007: Boards agree to a compliance review
24 Aug. 2007: Eligibility Report
20 Jun. 2008: Panel issues the Compliance review report
9 Jul. 2008: Boards' decision to request Management to prepare an Action Plan
5 May 2009: Management Action Plan submitted to the Boards
22 Jul. 2009: 1st IRM Monitoring Report issued
28 Jul. 2010: 2nd IRM Monitoring Report issued
6 Jun. 2011: 3rd IRM Monitoring Report issued
Sep. 2012: 4th and last IRM Monitoring Report issued
Closed

Project Information:

The Project:
In 1999, the Government of Uganda (GOU), in an effort to address its serious energy problems, contracted with Nile Power (AESNP), a privately owned consortium, to construct and operate two inter-linked projects: the Bujagali Hydropower Station, a 250- MW run-of-the-river power plant, and Bujagali Interconnection Project, a power transmission line linking the power plant to the national grid. In December 2001, the African Development Bank's Board approved a private sector loan of US$ 55 million to finance the construction of the project. The loan was cancelled when AESNP withdrew from the project before construction began. Following the withdrawal of AESNP, the GOU decided to split the project into two separately funded but connected projects, the Bujagali hydropower project (BHP) and the Bujagali Interconnection Project (BIP). In 2005, it awarded a BOOT (Build-Own-Operate-Transfer) contract for the hydropower project (BHP) to Bujagali Energy Ltd (BEL), which is a Ugandan company, established as a special purpose consortium by Sithe Global Power; Industrial Promotion Services (Kenya); Jubilee Investment Co.; and the Aga Khan Fund for Economic Development. BEL submitted an application to the African Development Bank (the private sector window) for partial funding for the BHP. The GOU and BEL signed a Power Purchase Agreement and an Implementation Agreement. The GOU assigned the implementation of the Bujagali Interconnection Project (BIP) to Uganda Electricity Transmission Company Ltd. (UETCL), a state-owned enterprise. The objective of BIP is to provide the transmission infrastructure to evacuate power from the BHP to the distribution companies. It will be implemented by UETCL, and the GOU will be the guarantor. The GOU requested partial funding for BIP from the African Development Fund (the public sector window).
The Bujagali Hydroelectric Power Project (BHP)

The African Development Bank reconsidered BHP in 2005. In August 2006, it conducted a joint appraisal mission with the other lenders. The Investment Proposal [hereinafter, "BHP-IP"] was reviewed by the Bank's Private Sector Operations Committee, the Private Sector Investment Committee and the Senior Management Committee. BHP is comprised of: (a) a 30 meter high dam with a small reservoir (388 ha); (b) a main spillway gate and an auxiliary siphon spillway; (c) a powerhouse with a total installed capacity of 250 MW (five units of 50 MW turbines);, and, (d) a switchyard.4 BHP's total cost at the time of appraisal was estimated at US$ 735.5 million of which the AFDB loan of US$ 110 million constitutes approximately 15%. The AFDB Group approved the project on 2 May 2007 and signed its Loan Agreement with BEL on December 14, 2007. The BHP-IP5 states that the development impacts of the project will include (i) producing least-cost power for domestic use and export to neighboring countries; (ii) enhancing the efficiency of Uganda's power sector through an increased role for the private sector; (iii) increasing rural households access to electricity; (iv) creating jobs and business opportunities for local enterprises; (vi) upgrading community6 social services, boreholes, clinics, and schools;7 and (v) contributing to GOU revenues--at present the subsidized tariff is 17.2 US cents per unit (compared to an average unit cost of 22 US cents) - with the commissioning of BHP and phasing out of the costly emergency thermal generators the average unit cost will drop to 15 US cents.

The Bujagali Interconnection Project (BIP)

The GOU requested the African Development Fund (ADF) to finance the BIP in August 2006. The BIP comprises: (i) 75 km of 220 kV double circuit line from BHS to Kawanda substation, (ii) 15 km of 132 kV double circuit line from Kawanda to the existing Mutundwe substation, (iii) 8 km of 132 kV double circuit line to Nalubaale substation, (iv) 5 km of 132 kV double circuit line to link BHS to the existing line to Tororo substation, (v) a new 132 kV substation at Kawanda, and (vi) extension of 132 kV from Mutundwe substation. The BIP is expected to cost UA 50.13 million of which the ADF loan of UA 19.21 million constitutes approximately 38.3%. The ADF will finance: the transmission lines; the substations; and the audit of project accounts. The additional funding is being provided by the Japan Bank for International Cooperation (JBIC) and UETCL/GOU, which will also bear the cost of resettlement/compensation. The appraisal report lists the following BIP development impacts: (i) restoring reliable electricity supply; (ii) contributing to poverty reduction by increasing the population's access to electricity - the project is expected to result in the power distribution company, UMEME, distributing power to an additional 60,000 consumers by 2012 and the Rural Electrification Authority having the resources to connect some 220,000 new rural consumers; (iv) enhancing energy trade cooperation between Uganda, Kenya, Tanzania and Rwanda; and (v) providing alternative energy to reduce carbon dioxide emissions from the use of biomass and fuel wood.

In addition, the International Development Association (IDA) supported the BHP through a guarantee of up to US$115 million for payment of interest and repayment of the principal amount of a loan to BEL. The Project was also to be financed through, inter alia, an International Financial Corporation (IFC) loan and a Multilateral Investment Guarantee Agency (MIGA) Guarantee. In total, the World Bank Group's financial support to the Bujagali Project was to be up to US$360 million. The BHP also received financing from the European Investment Bank.

The Request:

Requesters claim against the proposed Bujagali hydropower (BHP) and interconnection projects in Uganda (BIP) and ask the African Bank does not approved a financing for the Bujagali project because like in the previous AESNP case, BEL's Bujagali hydropower dam project is based on flawed assumptions and data that have little or no bearing to the current situation and therefore are not an adequate basis for approval of the project. The following are issues of concern: hydrological risks; climate change; cumulative impact assessments; Kalagala "offset"; economic, comprehensive options and affordability assessment; information disclosure, consultation, transparency and openness; dam safety issues; indigenous peoples, cultural and spiritual issues; compensation and resettlement; impact on fauna. Requesters say they have raised a number of social, economic and environmental concerns about the project to the project sponsors, Bujagali Energy Limited (BEL), Government of Uganda and the World Bank Group, that have not been addressed ever-since the inception of the project in Uganda. The Requestors' claims of non-compliance with policies, procedures and guidelines of the African Development Bank include: Information Disclosure; Environmental Assessment; Economic Evaluation of Investment Operations; Poverty Reduction; Involuntary Resettlement; Accountability; Good Governance; Stakeholders Consultations and Participation; Safety of Dams; Integrated Environmental and Social Impact Assessment (IESIA); Environment and Social Auditing.

As regards the 2001 project, other complaints had been submitted to the World Bank's Inspection Panel on the Bujagali Power sector project on 27 July 2001 (Uganda: Third Power Project, Fourth Power Project, and Proposed Bujugali Hydropower Project) and 2 complaints to the IFC's CAO on 19 June 2001 and 1st July 2001 (Uganda / Bujagali-02/Bujagali Falls and Uganda / Bujagali-03/Canada)

As regards the 2007 project on the BHP and BIP, similar claims were also submitted to the Inspection Panel on 5 March 2007 (Case 44, Uganda: Private Power Generation Project) and to the CAO on 16 May 2011 (Uganda / Bujagali Energy-05/Bujagali). The same set of requesters filed another complaint with the European Investment Bank (EIB) Complaints Mechanism in October 2009. The issues included in the complaint are similar.

Case Status and Findings:

The Compliance review final report is issued on 20 June 2008. The Panel appreciates the generous cooperation of the World Bank Inspection Panel which conducted its own review of the "UGANDA: Private Power Generation Project". The Compliance Review Panel and the World Bank Inspection Panel coordinated their field investigations of the Bujagali projects and shared consultants and technical information during this investigation in order to enhance the efficiency and cost effectiveness of each of their investigations. While this collaboration between the Panel and the World Bank Inspection Panel worked to the mutual benefit of both parties, each Panel focused its compliance review on its own Bank's policies and procedures and each Panel has made its own independent judgments about the compliance of its Management and staff with its Bank's policies and procedures. Accordingly, while there may be common elements in their respective reports, the IRM Panel's findings and recommendations in this report are based on the independent judgment of the IRM Panel and exclusively on the AFDB's policies and procedures.

Short chronology

In 1999, the Government of Uganda (GOU), in an effort to address its serious energy problems, contracted with Nile Power (AESNP), a privately owned consortium, to construct and operate two inter-linked projects: the Bujagali Hydropower Station, a 250- MW run-of-the-river power plant, and Bujagali Interconnection Project, a power transmission line linking the power plant to the national grid. In December 2001, the African Development Bank's Board approved a private sector loan of US$ 55 million to finance the construction of the project. The loan was cancelled when AESNP withdrew from the project before construction began but after it had completed economic, social and environmental assessments of the project; the Environmental and Social Action plan; the Resettlement and Community Development Action Plan for the hydropower portion of the project; and the Resettlement Action Plan for the transmission line. In addition, approximately 8,700 people (about 1,288 households) had either been resettled or had lost assets for which they were entitled to compensation because of the project. Some of these people were fully compensated. Others still had unresolved resettlement and compensation issues. AESNP had also begun establishing the area at the Kalagala Falls as an offset for some of the environmental and social consequences of the project.

AESNP's social and environmental implementation unit was reconstituted as the Bujagali Implementation Unit (BIU) with the capacity and the responsibility to deal with the issues relating to the Kalagala offset and to resettlement that remained unresolved after the withdrawal of AESNP from the project. The BIU reports to the Uganda Electricity Transmission Company Ltd. (UETCL). Until the implementation of the current Bujagali project, BIU monitored the situation of the affected people and at the Kalagala Falls but did not actually either resettle new people or deal with the legacy issues.

Following the withdrawal of AESNP, the GOU decided to split the project into two separately funded but connected projects, the Bujagali hydropower project (BHP) and the Bujagali Interconnection Project (BIP).

In 2005, it awarded a BOOT (Build-Own-Operate-Transfer) contract for the hydropower project (BHP) to Bujagali Energy Ltd (BEL), which is a Ugandan company, established as a special purpose consortium by Sithe Global Power; Industrial Promotion Services (Kenya); Jubilee Investment Co.; and the Aga Khan Fund for Economic Development. **BEL submitted an application to the African Development Bank (the private sector window) for partial funding for the BHP**. The GOU and BEL signed a Power Purchase Agreement and an Implementation Agreement. Pursuant to Article II Section 2.1 (b) of the former agreement, BEL was required to update the Resettlement Action Plan, the Resettlement and Community Action Plan and the Environmental Impact Assessment prepared by AESNP. BEL hired a consultant, Burnside, to prepare the Social and Environmental Assessment Study (SEA) for the BHP. This also resulted in the preparation of other key documents and plans required by the Bank's policies and procedures, including the **"Assessment of Past Resettlement Activities and Action Plan" (APRAP) that deals with the outstanding resettlement and compensation issues from the first project and other resettlement and compensation issues that may arise from the BHP, the Summary SEA, and the Resettlement and Community Development Action Plan (RCDAP).**

The GOU assigned the implementation of the Bujagali Interconnection Project (BIP) to Uganda Electricity Transmission Company Ltd. (UETCL), a state-owned enterprise. The objective of BIP is to provide the transmission infrastructure to evacuate power from the BHP to the distribution companies. It will be implemented by UETCL, and the GOU will be the guarantor. Burnside has also prepared the SEA of BIP for UETCL. BEL will act as an agent of UETCL, helping it oversee the implementation of the project. **The GOU requested partial funding for BIP from the African Development Fund (the public sector window).** The Summary of the SEA together with the APRAP and the RCDAP for the BIP, were published by the Bank's Public Information Centre, posted on the Bank's website on December 2006 and submitted to the Bank Group's Boards of Directors on 23 January 2007. They were also presented in public meetings organized in April 2007 by the Ugandan Ministry of Energy and Mineral Development and the National Environmental Management Authority (NEMA). The resettlement and compensation for the affected people was expected to be completed by December 2007, which was before any construction was supposed to have begun on the transmission line. However, at the time of the Panel's visit to Uganda neither the resettlement nor the construction of the BIP had begun. Pursuant to the agreements governing these projects, BEL appointed a witness NGO, Inter-Aid, to observe the resettlement and compensation process. In addition, the sponsors established a grievance mechanism, in which Inter-Aid participates in the decision-making procedure, to deal with issues arising during the resettlement and compensation process.

The Bujagali Hydroelectric Power Project (BHP)

The African Development Bank (hereafter referred to as AFDB or the Bank) reconsidered BHP in 2005. In August 2006, it conducted a joint appraisal mission with the other lenders. The Investment Proposal [hereinafter, "BHP-IP"] was reviewed by the Bank's Private Sector Operations Committee, the Private Sector Investment Committee and the Senior Management Committee

The Bujagali Interconnection Project (BIP)

The GOU requested the African Development Fund (ADF) to finance the BIP in August 2006. The BIP is expected to cost UA 50.13 million of which the ADF loan of UA 19.21 million constitutes approximately 38.3%. The ADF will finance: the transmission lines; the substations; and the audit of project accounts. The additional funding is being provided by the Japan Bank for International Cooperation (JBIC) and UETCL/GOU, which will also bear the cost of resettlement/compensation.

Social and Cultural Issues

The requesters first claim that there are unresolved resettlement and compensation issues relating to BHP and BIP

These issues, some of which are outstanding issues from the time of AESNP's involvement in the project, include loss of livelihoods, under-compensation, inability to obtain secure land titles, lack of adequate consultation, and requests to share in project benefits, including access to electricity. The Panel determined that the Bank policies applicable to this issue, include the Policy on Involuntary Resettlement, which key principles of meaningful consultations, equitable treatment, and sharing of benefits are repeated in the Integrated Environment and Social Impact Assessment Guidelines; Policy on Integrated Water Resources Management; Environmental Review Procedures for Private Sector Operations; OM600 in the Operations Manual; and the Policies on Gender and Poverty Reduction. Based on these policies and its investigations, the Panel concludes that:

- The failure to resolve all legacy issues prior to the commencement of project activities and the resulting uncertainty that this has created, especially for those people to be involuntarily resettled for the BIP, constitutes noncompliance with the requirements of the Policy on Involuntary Resettlement.
- The perfunctory references to the gender dimensions of this project in the Bank documents constitute non-compliance with the requirements of both OM 600 and the Policy on Gender.
- The shortage of systematically collected data about the situation of the project affected people before the commencement of the projects makes it difficult to confidently establish if the resettlement plan meets all the requirements of the applicable policies. As a result the Panel finds that the Bank has failed to comply with the Policies on Involuntary Resettlement, Gender, and Poverty Reduction.

Second, the Requesters complain about the unfair treatment of the Basoga people, who they argue should be treated as indigenous people

The Panel, noting that the **AFDB has no specific policy dealing with indigenous people**, finds that the Basoga people are one of Uganda's largest ethnic groups and are not subject to any special discrimination.

Third, the Requesters argue that the Bank staff failed to pay sufficient regard to the cultural and spiritual significance of the Bujagali Falls and decided to proceed with the project without adequate consultations with all the relevant spiritual leaders of the Basoga

The Management countered that the Bank does not have a policy on physical cultural resources but is committed to respecting the World Bank's policy on physical cultural resources. The Panel, noting that the AFDB has no policy on physical cultural resources, finds that references to cultural and spiritual property are included in the Policy on Involuntary Resettlement, and the Integrated Environment and Social Impact Assessment Guidelines, which need to be interpreted in light of the Bank's requirements for "meaningful consultations" as set out in a number of Bank policies. Based on these policies, the Panel concludes that:

- The admonition to avoid destroying cultural and religious sites and the particular emphasis on consultation and participation in AFDB policies imposes on the Bank Management and staff an obligation to ensure that due diligence, including meaningfully consultation with all stakeholders, is fully observed in regard to any cultural or spiritual site that may be damaged by a Bank-funded project.
- The stipulation in the Policy on Involuntary Resettlement that particular attention be paid to "disadvantaged groups", which it defines to include religious minorities, means that the Bank should have paid particular attention to those Basoga, consisting of the Nabamba Bujagali and his followers, who expressed concern that the destruction of the Bujagali Falls was proceeding without proper attention to all the necessary religious rituals and procedures. This obligation on the Bank is particularly relevant in this case because of the stipulation in the Environmental Review Procedures

for Public Sector Operations and the Policy on Good Governance that the Bank ensure that the projects it finances comply with the international agreements ratified by the borrowing country, which in the case of Uganda include a number of conventions guaranteeing its citizens the freedom to practice their religion.
- The Bank appraisal of the BHP should have determined if there had been meaningful consultations between the sponsor of BHP and the Nabamba Bujagali and the Management's failure to do so amounts to non-compliance with the applicable policies.
- The applicable Bank policies only require that the Bank ensure that the project sponsors engage in meaningful consultations with all the stakeholders in this issue and do not require the AFDB to give any one of them a veto over the project.
- The appropriate manifestation of compliance with the requirements relating to cultural property and consultation in Bank policies would have been a section in the project appraisal report indicating that the Bank staff had recognized the profound significance of this issue and appraised the consultations that had taken place, and explaining why they believed the issue had been adequately and appropriately addressed and all stakeholders interests respected. The fact that the appraisal report does not contain such a section amounts to an instance of Bank Management and staff non-compliance.

Fourth, the Requesters expressed concern about the independence of the Witness NGO and its roles in both the consultations about resettlement packages and in the mediation of grievances related to those packages
The Panel notes that the Policy on Involuntary Resettlement requires an independent party to monitor the resettlement and that there be a grievance mechanism. It concludes that the appointment of one Witness NGO to be both the independent monitor of the resettlement and a participant in the decision making process that deals with grievances arising from the resettlement fails to comply with the applicable policy requirements.

Fifth, the Requesters alleged that they had been given limited access to the projects' documents
Although the Panel found that many stakeholders lacked information about the AFDB's role in the Bujagali projects, it concludes that Bank staff properly disclosed all Bank documents required by the applicable provisions in the Policy on Information Disclosure.

Sixth, the Requesters complained that there had not been adequate consultation with all stakeholders in this project
The Panel notes that consultation is discussed in many different Bank policies. It interprets these policies to mean that Management has an obligation to assess the adequacy of the consultations undertaken by the project sponsor or the implementing agency in its appraisal report. While the Panel is aware that the projects' sponsors made considerable effort to consult with project stakeholders, it also met with a number of stakeholders in the project, including some who supported the project, who felt that they had not been adequately consulted. The Panel finds that while it is not clear that the deficiencies in consultation in these projects amount to an event of non-compliance, the Panel is concerned about the Bank Management's failure to include an assessment of the adequacy of the consultation in the BHP and BIP appraisal reports.

Environmental issues
The Requesters raised six environmental issues.

First, the Requesters claim that the cumulative impacts of a cascade of dams including Bujagali on the River Nile have not been adequately addressed in the BEL's social and environmental assessment document (SEA)
Although the analysis of cumulative impacts is a best practice in environmental risk management, the Panel notes that the Bank's applicable environmental guidelines do not cover this subject.

Consequently, the Panel concludes that the Bank Management and staff are not at fault for not providing analysis of the cumulative impacts in its appraisal and, therefore, this issue is not a case of non-compliance with the Bank's policies and procedures.

Second, the Requesters claim that, despite applicable Bank policies the SEA does not adequately discuss the potential impact of the Bujagali dam on the long term health of Lake Victoria
There are two dimensions to the claim: (a) the impact of the dam on Lake water level; and, (b) the linkages between the dropping of the Lake water levels and its ecological functions. With regard to the first aspect, the Bank Management and the project preparation documents (PPA Study, SEA) agree with Requesters that water withdrawals from existing dams have in recent years exceeded the limits allowed under the Agreed Curve (a mathematical formula to regulate water release agreed upon by Uganda and Egypt). The Management is correct in pointing out that the Bujagali dam, by re-using the water flowing from existing dams will help increase the amount of electricity generated from the same amount of water. Despite this, the Panel is of the view that the new dam will increase the incentive for GOU to extract more water to generate as much power as possible. This is because the BHP is governed by a capacity-based power purchase agreement, and the only way for GOU to avoid paying for electricity not generated is to ensure that as much water as needed is made available to the dam, including in driest years. On the second aspect, the Panel could not detect, within the ranges of hydrological variations experienced since the early 1900s, evidence of a causal relationship between the water level in Lake Victoria and its ecological functions. Accordingly, the Panel concludes that although there is a risk that the Bujagali dam could increase water drainage from the Lake, water withdrawals as a result of the dams are unlikely to be the main cause of the shrinking of the Lake to levels where its ecological functions could be severely affected.

Third, the Requesters challenge the reliability of the data used to assess the impacts of the Project on flora and fauna (in particular, the fisheries)
The Panel observes that the extreme complexity of ichthyology in the Victoria Nile and in the Lake is illustrated not only in project studies but also in other recent studies and surveys, like the ones by IUCN. Significant efforts are however being made by the Project to study fish populations, and in particular endemic species, in the Victoria Nile reach. Ugandan National Fisheries Resources Research Institute (NaFIRRI), a competent national research institution, conducts quarterly monitoring studies which it reports to BEL. In the Panel's opinion, the Bank Management and staff exercised due diligence in accepting the findings of these studies and has complied with the applicable Bank environmental policies and guidelines.

Fourth, the Requesters question the enforceability of the GOU's commitment to preserve the Kalagala Falls as an offset to the losses resulting from the Bujagali project
Even though the establishment of the Kalagala offset was in response to requirement of a World Bank policy, the Panel finds that the ecological and socioeconomic purposes of the Kalagala offset are consistent with AFDB social and environmental policies. However, given the fact that GOU acceded to the request to preserve the Kalagala site as an offset to the ecological, economic and socio-cultural losses caused by the Bujagali dam, the Panel is concerned that there is no long term management plan for ensuring that the offset sustainably achieves its environmental and socioeconomic mitigation functions.

Fifth, the Requesters believe that the SEA fails to address dam safety which, in their view, violates ABD policies
The Panel finds that the Bank does not have an explicit policy on dam safety, and that it was reasonable for the AFDB Management and staff to rely on the World Bank's findings with respect to dam safety.

Sixth, the Requesters complained during the CRMU fact-finding mission that the SEA did not adequately assess the environmental impacts of the re-routing of the transmission line (T-Line)

In the Panel's view, the re-routing in the suburbs of Kampala will help in minimizing the impact on both human settlements and the Lubigi wetlands. However, in the areas where the T-Line crosses the Mabira, Namyoya and Kifu Central Forest Reserves, the Panel could not find evidence that the option of overlapping the existing and the new transmission lines, which could have helped reduce the width of the way leave to be deforested, was considered. The Panel finds that the failure to consider the possibility of overlapping the two transmission lines is an instance of non-compliance with the Bank's environmental policy.

Hydrological Issues

The Requesters challenge the adequacy of the hydrological studies that were undertaken as part of the planning of the Bujagali project. The Panel finds that detailed peer-reviewed hydrological studies were carried out as part of the preparation for the Bujagali project, but it notes that three critical planning documents use them differently. The project SEA is based on the standard interpretation of the Agreed Curve, while the Economic and Financial Study (PPA study) utilizes the Constant Release, a new interpretation of the Agreed Curve in assessing the projects' feasibility. The BHP Investment Proposal does not clarify how it resolved the differences in interpretations of the operating rule of the Lake.

Since the Agreed Curve and the Constant Release can result in different amounts of water being released from the Lake, different hydrological consequences are likely to follow from the adoption of one interpretation or the other. The Panel concludes that the fact that the BHP-IP does not clarify how it resolved the discrepancy in the interpretation of the Agreed Curve between the SEA and the PPA Study, while not strictly inconsistent with Bank policies, is a failure of the Bank Management and staff, particularly given the significant efforts made in the hydrological studies undertaken as part of the planning process for this project.

The Requesters also challenge the approach used in assessing the hydrological risk, i.e. the hydrological context under which the planned dam will operate. The Panel finds that the PPA Study used all available time series data (i.e., from 1900 to 2005). On the basis of patterns of hydrological variations observed during this period, high and low flow scenarios (with respectively 21% and 79% of occurrence) are predicted for the 20 next years. The Panel concludes that the approach used in the PPA Study is consistent with other hydrological studies conducted for similar projects.

As part of their claim that hydrological risk analysis was not properly assessed, the Requesters complain that climate change has not been given attention in the project appraisal documents. The Panel notes that several studies targeting the project area address this issue. However, there is no evidence that these studies informed the analysis undertaken as part of the projects' planning. Given the unfavorable hydrological conditions that prevailed in 2000-2005 and the increasing global evidence of the impact of climate change on water resources, the Panel believes that Bank Management and staff should have paid special attention to the hydrological/climate change risks in the project appraisal. However, the Panel concludes that in the absence of a specific AFDB Policy requiring staff to examine such risks, it cannot make a finding of non-compliance.

Economics Issues

The Requesters raise six concerns relating to the economics of the projects.

First, the Requesters claim that the economic analysis in the PPA Study does not adequately address the project's economic viability in relation to the hydrological risk.

The Panel finds that the Bank's Environmental Review Procedures for Public Sector Operations include a list of the issues to be considered in environmental and social assessments and that the Operations Manual in OM600 addresses the issue of economic analyses. Based on these policies and its investigations, the Panel concludes that:

- While the hydrology issues were addressed in the PPA Study, the Bank Management and staff are not in compliance with the applicable policies because they did not include adequate information in the Bank's own appraisal documents on hydrological sustainability and related economic impacts.
- The novel interpretation of the existing international agreements dealing with water release from Lake Victoria adopted by the PPA Study is inconsistent with the standard interpretation cited in the BHP-IP. Since the application of these different interpretations could affect the overall result of the economic analysis, the Bank Management should have explained, in the project documents, the possible impact of the different interpretations of the Agreed Curve on the economic and financial viability of the project. This is particularly relevant because applicable Bank policies specifically instruct Bank staff to ensure that the Bank-financed projects comply with the international agreements ratified by the borrowing country.

Second, the Requesters claim that because the social and environmental damages attributed to the Bujagali project were not monetized, and the discount rate used in the economic analysis is too high, the Bank studies underestimate the total costs of the Bujagali projects
The Panel finds, based on the applicable policies—the Policy on Involuntary Resettlement and OM 600—that:
- The Bank Management and staff have not fully complied with the Resettlement Policy because they did not include all resettlement costs in their economic analysis of the project.
- While it is generally preferred (as a best practice) to put a value on all environmental and social costs, in the Bank's appraisal process, including the PPA Study, the Bank's Management and staff have complied with OM600 because they identified the most relevant externalities at least in qualitative terms.
- The discount rate used by the Bank staff complied with the Bank's requirements.

Third, the Requesters contend that alternative energy options have not been sufficiently studied to conclude that the Bujagali project is the least-cost option
The Panel agrees with the Requesters that more detailed analysis of the potential alternatives should have been made in the Bank's project appraisal documents, as well as in the PPA Study. However, the Panel considers that the Bank staff has not failed to comply with applicable Bank policies or procedures since the existing policies and procedures do not provide clear guidance on how to conduct an economic analysis of alternatives.

Fourth, the Requesters claim that Bujagali is an economically risky project because of its high costs
The Panel is concerned about the different costs used in the Bank's appraisal documents and the PPA Study, and finds it unsatisfactory that the project documents presented to the Boards of Directors some months after the completion of the PPA Study neither comment on the differential in capital costs between the PPA Study and the project appraisal documents, nor provides any explanations on how these differences could affect the result of the financial and economic analysis. Consequently, the Panel concludes that the Bank failed to comply with the applicable policies which require Bank staff to provide full explanations and justifications in the Bank's appraisal documents for the selection of Bujagali.

Fifth, the Requesters' concern about the high cost of the Project leads them to express doubts about the citizens' ability to afford the resulting tariffs
The Panel finds no reason to disagree with the Management's views that the recent increases in electricity tariffs are a result of the investments in short term thermal generation capacity, and that future tariffs are likely to decline when the thermal power plants are replaced by the Bujagali power. However, the Panel is aware that other project risks, including the high technical and commercial losses in the electricity transmission and distribution network, could affect the tariff structure. In its opinion the Bank Management and staff should have ensured that the assumptions about these technical and commercial losses were varied as part of the testing of the capacity of the system to

cover the cost of the Bujagali power or to reduce the Government subsidies to the energy sector. On the basis of these findings, the Panel concludes that: there is no basis for holding that the Bank failed to comply with the applicable policies on the issue of future tariffs; the Bank Management and staff have not complied with OM600 on project sustainability and risk and sensitivity analysis.

Sixth, the Requesters claim that the Bujagali dam will not meet the basic energy needs of the majority of Ugandans who are now without power and live far from the national grid
The Panel agrees with both the Requesters and the Management that the Bujagali projects cannot solve the energy needs of the majority of Ugandans, especially those living in rural areas. It is also a concern for the Panel that, despite the requirements of OM600 and the Policy on Poverty Reduction, there was very little discussion of the economic impact of the project on low income households in either the Bank's projects documents or the PPA Study. Accordingly, the Panel concludes that the Bank Management and staff have not complied with those applicable policies which require the Bank to pay particular attention to poverty issues in its project appraisals.

Recommendations
The objective of the Compliance Review Panel's recommendations to the Boards of Directors and the Bank's Management is to contribute to lesson-learning in order to improve the Bank's policies, procedures and operational systems. Accordingly, the Panel recommends that:
• The Bank should streamline and systematize its policies and procedures so that they become easily accessible to the staff and the public, in line with the Bank's Policy on Information Disclosure.
• The Bank should include specific references to policies and procedures in project appraisal documents to indicate how they have complied with them.
• The Bank should include adequate information in appraisal documents to justify their conclusions and recommendations.
• The Bank should review the adequacy of the number and specialization of staff and consultants required for complex projects in order to ensure that they fulfill institutional needs in multidisciplinary areas.
• The Bank should take appropriate action to ensure that the Bank staff has an adequate knowledge of the Bank's policies and how they are applied in its operations, including in co-financed operations.
• The Bank should review its data storage system to ensure that project documents become more easily available to staff involved in the Bank's operations as well as those working on project evaluation and accountability functions.
• The Boards of Directors should appoint an IRM Expert and the Director of CRMU to conduct the annual reviews of the implementation of the Boards of Directors' decisions based on this report.

Monitoring
The Boards of Directors of the Bank Group on 9 July, 2009, authorized the IRM to monitor the implementation of the findings of noncompliance issues raised by the IRM Review Panel's Compliance Review Report and the related Management Action Plan on the Bujagali Hydropower Project and Bujagali Interconnection Project, approved by the Boards on 22 May, 2009.
There have been 4 monitoring reports, and monitoring ended in September 2012.

22 July 2009: **1st IRM Monitoring Report**
The first monitoring mission conducted by Dr. van Putten, one of the IRM Experts, and Mr. Per Eldar Sovik, the Director of the Compliance Review and Mediation Unit.
The IRM Monitoring Team would like to underscore that the IRM monitoring of the implementation of activities to mitigate non-compliance issues shall in no way preempt or duplicate the responsibility of the Bank' s operational departments to supervise the implementation of the Bujagali projects, including the measures required to mitigate the adverse effects identified by the IRM Review Panel. While there might be a number of important issues that require a close supervision by the Bank's

Management and staff during project implementation, **the IRM Monitoring Report puts emphasis on the glaring issues that the IRM Monitoring Team identified as critical for compliance and the remedy of the inflicted harm**.

Serious problems were discovered by the IRM Team with regard to the resettlements and compensation in areas crossed by the new T-line under construction for the evacuation of power from the Bujagali Hydropower Plant to Kampala. The construction contract had been awarded, and the contractor had commenced work prior to the resolution of the outstanding land issues. The IRM Monitoring Team was shown plots where holes had been excavated on the ground for towers, but works had been temporarily suspended due to lack of agreements with the landowners. In another case, a widow living in the Mulawa village said she had been informed that she could not be compensated because she did not have a "file" with the authorities. It apparently had something to do with family disputes over the title deeds to the land she is occupying. The IRM Monitoring Team mentioned her case in its meeting at the Ministry of Energy and Mineral Development, and a few days later the Team was informed by the same woman that her file had been opened on her case and she had been offered compensation. Some people affected by the T-line had rejected the compensation offer and brought petitions against the Government. At the time of the IRM Team's visit to Uganda, the court decision was pending. The Team has later heard that the court has ordered an injunction until mid September 2009. This might withhold the work of the contractor until the final court hearing and ruling scheduled for September 2009. The IRM Team also learned that the main cause of this dispute relates to the valuation of land. **The claimants demand is to be compensated on the basis of the current market value of their land, while the Government's Chief Valuator's offer is far less. In the meetings with the representatives of UETCL, BEL, the Ministry of Energy and Mineral Developments and the Ministry of Finance, the IRM Monitoring Team was assured that the Government had preserved adequate funds to cover the due compensation payments. In addition, the officials indicated to the IRM Team their strong willingness to resolving these problems out of courts (amicably), and mentioned to the Team that a high level decision on the matter was expected soon**.

IRM Monitoring team is disappointed that the project is not yet in full compliance with the Bank's policy although it is almost one year since the IRM Review Panel communicated its concerns over these issues to the Bank's Management.

While the IRM

A regards cultural and spiritual concerns, the Monitoring Team agrees that the solutions to the existing cultural/religious problems have to be found in Uganda, the IRM Team is of the opinion that the Bank can still play a role to ensure, through its project supervision, that appropriate consultations are continued and concluded in a satisfactory way to all stakeholders. As several stakeholders proposed to the IRM Team, this issue could find a lasting solution through a process to be further elaborated and decided upon by the suggested committee comprising representatives of the religious leaders, NGOs, relevant Government ministries, and BEL, and with possible observers from the project financiers, including AfDB.

The IRM Monitoring Team highlights three important issues that would need the Bank Management's immediate attention, foremost through its supervision to ensure that suitable actions are taken by the appropriate stakeholders in Uganda to mitigate harm to project affected people, and secondly, to ensure that the Bujagali projects become compliant with the AFDB Groups policies and procedures. These three issues are:

1- On Resettlement and Compensation: To ensure that the process of providing appropriate restoration of the livelihoods of involuntary resettled people and to resolve outstanding compensation issues for expropriated land in accordance with the Bank's policies.

2- On Cultural and Spiritual Issues: To ensure that the consultation process be continued in order to mitigate the negative effects of the cultural/religious tension that will be caused as a result of the inundation of the Bujagali Falls, including the possibility of establishing a fast track committee to deal with this issue.

3- On Kalagala Off-set and Forest Reserves Mitigation Measures: To ensure that the Sustainable Management Plan (SMP) is reviewed by the Bank as indicated in the Action Plan and that it is implemented as intended. The IRM Monitoring Team will undertake a second monitoring mission to Uganda during 2010. In the meantime, the IRM Team strongly encourages the Bank's management and staff to supervise that the aforementioned actions, as also recommended in the Management's Action Plan, are given the serious attention that they deserve to improve the situation of the projects affected people and communities.

28 July 2010: 2nd IRM Monitoring Report

The Monitoring Team comprised of Dr. Maartje van Putten accompanied by Ms. Grace Kimani, Senior Compliance Officer of CRMU. The Monitoring Team was accompanied in several meetings and the field visits by Mr. Daniel Isooba, Infrastructure Specialist based in the AfDB Uganda field office (UGFO).

In a general sense the IRM Monitoring Team notes that very little progress has been made regarding the pending issues reported by the Compliance Panel in 2008, followed by the first Monitoring team in 2009. Many of those pending issues relate to compensation. The project, with all its positive (clean-energy delivery) and negative impacts (on the livelihoods of people in the project area), is considered by many as a model for other hydroelectric projects in the continent. However, to reach such a positive status the Monitoring Team advises all the stakeholders, including the Bank's Management, to solve the pending issues before the dam is completed and commissioned. It would, for example, be rather unfair if energy is delivered through the transmission line to Kampala and neighboring countries if the fishermen in the resettlement village, who lost their traditional way of living at the riverbanks, are still waiting to be connected to the promised water taps and electricity supply. Likewise, many landowners who lost land because of the transmission line are not yet compensated.

The IRM Monitoring Team proposes to the Bank's Management to supervise more closely the following actions in order to solve the pending issues:

1- On Resettlement and Compensation: To ensure that the Naminya resettlement village is connected to piped water and electricity. Furthermore, that the pending compensation issues along the transmission line that are not in court are settled without further delays. The Bank should urge the Government of Uganda to form a Committee consisting of representatives of the claimants and relevant government ministries and agencies to hear and determine agreeable compensation on case-by-case basis to all pending compensation issues as soon as possible and at the latest, before the Bujagali Projects are completed and commissioned.

2- On Cultural and Spiritual Issues: To ensure that the project sponsor-BEL, the relevant government ministries and other stakeholders including the two spiritual leaders Nabamba Bujagali and Lubaale Nfuudu are involved in resolving the issues of settlement and appeasement of the spirits and the completion of the three (3) cultural shrines.

3- On Kalagala Off-set and Forest Reserves Mitigation Measures: To ensure that the Sustainable Management Plan (SMP) is reviewed by the Bank as indicated in the Action Plan and that it is implemented as intended, including the removal of the fences near the river to allow full and unhindered access to the falls by the local communities.

4- On the Blasting issue: Guarantee that the best international standards concerning blasting are used and that all the people affected by the blasting activities are adequately compensated by the project sponsor as soon as the blasting is finished.

6 Jun. 2011: 3rd IRM Monitoring Report

The third IRM monitoring mission took place from 27 April to 3 May, 2011. The Monitoring Team comprised of Dr. Maartje van Putten, one of the IRM Experts, and Ms. Grace Kimani, Principal Compliance Officer of CRMU. The Monitoring Team was accompanied in several meetings and field visits by Mr. Daniel Isooba, Infrastructure Specialist based in the AfDB Uganda field office (UGFO).

In general terms, the IRM Monitoring Team noted that progress has been made to resolve the pending issues reported by the Compliance Panel in 2008, followed by the 1st and 2nd IRM monitoring Reports of 2009 and 2010. However, there are notable pending social and environmental issues relating to compensation along the transmission line, relocation and appeasement of the spirits in the Bujagali Falls, and compensation for negative impacts of rock blasting.
In summary, the Monitoring Team learned that the Bujagali Projects are on course as planned and the generation of the first 50 MW will start in October 2011. The construction of the main transmission line may not be completed by then due to pending compensation cases. However, the Uganda Electricity Transmission Company Ltd (UETCL) has constructed an alternative transmission line (T-line) from the Bujagali Dam site connecting it to the existing Owen Fall Power Station where the 50 MM will be directed before the main T-line is completed by the time the whole project is commissioned by April next year (2012). The people resettled in Naminya village are somewhat happy with the progress made in addressing the pending issues reported last year. They now have (three) 3 fish ponds, connection of piped water is in progress and electricity connection will follow soon. Inter-denominational prayer service was held on 28 April, 2011 in memory of the people buried in Dumbel Island which will be inundated soon. The three (3) cultural shrines have been completed but relocation of the spirits to the shrines and the appeasement ceremonies are yet to be performed. The people affected by rock blasting are yet to be compensated by the project promoter-Bujagali Energy Limited (BEL). Last but not least, the case filed by 557 people is still pending in court and did not have a hearing date at the time of the mission. The Monitoring Team notes that despite the serious problems that occurred during construction of the Bujagali Projects, and the fact that the remaining issues have to be resolved urgently; the Bujagali Projects could be a good example for similar future projects within the region. It should not surprise anyone that problems occur in a project of this magnitude. Many lessons have been learned during the implementation phase. These lessons would have a great value that both the Government of Uganda and the Bank could benefit from if incorporated in similar projects in future

Sep. 2012: 4th and last IRM Monitoring Report
The fourth IRM monitoring mission was conducted on 6-10 August 2012 by a Team consisting of the Panel of Experts (Richard Bissell, Mafing Konde, and Arntraud Hartmann) and Grace Kimani, Principal Compliance Officer of CRMU. The Monitoring Team was assisted by Daniel Isooba, Infrastructure Specialist based in the AfDB Uganda field office (UGFO).
By this report, the IRM Monitoring Team intends to inform the Boards of Directors and the Bank's Management of the progress made since the issuance of the IRM 3rd Monitoring report in 2011. The Team also notes measures that could be undertaken to ensure that the gains achieved in the course of these projects are sustained, whether by this Bank or other lenders. The proposed measures are based on the discussions that the IRM Team held with different stakeholders during its mission in Uganda and discussions with and documents obtained by the Team from Bank staff in Tunis.
In general terms, the IRM Monitoring Team that progress has been made to resolve the pending issues reported by the Compliance Panel in 2008, and covered by the subsequent 1st, 2nd and 3rd IRM monitoring reports submitted during 2009-2011. However, there continue to be several specific but essential pending actions to be undertaken regarding social and environmental commitments from BEL, Government's ministries and agencies.
Moreover, there are some areas of concern that the Team considers could cause harm. These are:
• Kalagala Offset Area: The area established as an offset for the inundated area by Bujagali Falls yet lack sufficient support to protect it from intrusion such as illegal settlements, cultivation and illegal logging. Budgetary resources allocated by the government for the management of the Kalagala Offset area are inadequate. Moreover, institutional coordination mechanisms between different government agencies involved in the management of the Kalagala Offset need to be made operational.

• Blasting Compensation Process: People affected by rock blasting entered into a mediation process to agree on blasting damages and compensation. This process should be actively supported by the Bank so that it can come to satisfactory closure.
• Rural Electrification in Project Area: Access to power remains a key concern of villagers visited by the Team. While there is no formal commitment to connect individual households to the power lines in resettlement villages or villages affected by the transmission lines with power free of charge, the issue of lack of access to power by resettled households affected by the construction of transmission lines is a politically sensitive issue which deserves special attention. As a large number of mainly urban households will benefit from the additional power provided by the Bujagali plant, supporting access to power to people negatively impacted by the construction of the Bujagali dam and transmission lines, might wish to be considered.
• Spiritual Issues: Significant efforts have been made to resolve spiritual concerns. However, disagreements about the appropriate role of different spiritual leaders prevail. Bujagali Energy Limited (BEL) is encouraged to remain engaged in the consultation and reconciliation process to find a satisfactory solution to pending spiritual concerns.

As mentioned in the introductory remarks, the IRM Monitoring Team observed progress in resolving the pending social and environmental concerns posed by the Bujagali Projects. However, there are still some pending issues that the Bank Management should pay attention to during its supervision missions, in order to ensure compliance with Bank policies and the gains achieved in the course of this project are sustained. These are noted in the text above.

Lessons Learned
• Action plans of the Bank in response to compliance reviews need to be both responsive to the findings of non-compliance as well as more operational to allow for effective implementation and monitoring.
• With the presence of many lenders in a project, proactive leadership by individual lenders for achieving compliance with specific policy elements is desirable but needs to be clarified and implemented early in the project. Multi-donor supervision missions have their value, but clearer accountability to individual lenders would assist both project implementation and the focus of independent compliance review units.
• Resettlement and compensation programs have been plagued by unrealistic expectations through miscommunication in the early stages of the project. The Bank should engage experts on consultation throughout the project cycle.
• Witness NGOs can be useful instruments, but need to be given independence through transparent reporting and external funding rather than from the project promoter.
• Adequate baseline Surveys on the livelihood conditions for populations to be resettled need to be undertaken before resettlement takes place, otherwise no meaningful and realistic assessments on the restitution of livelihoods can be conducted.
• Important lessons can be learned from the compliance review of the Bujagali projects for future infrastructure projects in Uganda for the setting of national standards and the development of appropriate governance practices in affected communities.

Recommendations
• With regard to Compensation and Resettlement, the completion reports for the Bujagali dam and the T-lines pledged in the Management Action Plan need to be issued before the Bank completes its supervision of the project loan.
• Management shall work with BEL and UETCL to ensure that the Management project specific action plan commitments on compensation outcomes (in the section on social and cultural issues), which was approved in 2008, are finished prior to issuance of the completion reports.

• The Management shall submit to IRM/CRMU a copy of these completion reports for assessment. The IRM Panel of Experts and CRMU will then consider in 2013 concluding the IRM monitoring process with this report, provided that the submitted completion reports will be satisfactory

RQ 2010/2 – Medupi Power Project

Received: 28 September 2010

→ To documents

Country – South Africa
Requesters – 2 South Africa nationals (IDs confidential)
Concerns – health and environmental impacts; water; cumulative impacts; climate change; information, consultation and participation, no benefit for the poor
7 Oct. 2010: request registered for a compliance review
20 Jan. 2011: Eligibility Report (not available online). Boards reverted the Report to IRM for reassessment
19 May 2011: IRM's Reassessment and Revised Terms of Reference sent to the Boards of Directors. Boards reverted the Reassessment and Revised Terms of Reference to IRM for reassessment
6 Jul. 2011: IRM's Revised Reassessment and Revised Terms of Reference sent to the Boards of Directors, approved 15 Jul. 2011
19 Dec. 2012: Compliance review report released together with the Boards' decision and Management Action Plan
13 Feb. 2013: Management Updated Action Plan and IRM's Monitoring approved by the Boards
Open – Monitoring (compliance)

Project Information:
Reference: P-ZA-FAA-001
Approval date: 25/11/2009
Start date: 11/08/2010
Appraisal Date: 19/08/2009
Status: Ongoing
Implementing Agency: ESKOM HOLDINGS LTD (public sector client)

The Project:
The Medupi Power Project consists of the construction of a coal-fired base load power plant in Lephalale, Limpopo Province, comprising of six units with an installed capacity of 4,764 MW. The power station will be approximately 130 m high and approximately 500 m wide. The required stacks will be approximately 220 m in height. Direct-cooling technology will be applied and hence no cooling towers will be constructed. Other related infrastructure includes a coal stockpile, conveyor belts, and an ash dump. Transmission lines are also being constructed to integrate the station into the national electricity grid. The Medupi Power Project was approved by the Boards of Directors of the Bank Group on 25 November 2009 with a loan not exceeding the aggregate sum of EUR 930 million and ZAR (South African Rand) 10.63 billion. According to the Project Appraisal Report (PAR), the total cost of the project was estimated at EUR 11.19 billion (UA 10.18 billion). The Bank is cofinancing the project in partnership with several Export Credit Agencies (ECA), the World Bank, and Eskom. The AfDB funding is being applied to contracts for the supply and installation of six boilers and turbo-generators for which major contracts had been awarded before the AfDB became involved as a lender to the project. The construction of the power plant commenced in May 2008, and the first unit will be commissioned sometime in 2012-2013, and each subsequent unit will be commissioned thereafter at intervals of approximately six months. The rationale for the project is to ensure "improved reliability of energy supply" in support of the goals set out in the Country Strategy Paper Update 2009 for South Africa (2008-12) for enhancing socio-economic development. The project is also intended to promote local content and skills development. With regard to the environmental impact, the Project has been assigned Category 1.

The Request:

The Requestors raise several concerns of likely harm and possible violation of the Bank Group policies and procedures. Their allegations inter alia include the impact the loan from the Bank will have on South Africa's carbon reduction commitments, scaling up of investments into renewable energy technologies, and efforts to deal effectively with the threats of climate change. Furthermore, the Requestors claim that the project would largely benefit major industries that consume electricity below cost, while the communities living near the Medupi plant would be the ones to bear the burden of hidden costs in terms of health impact from air pollution, elevated SO_2 levels, and mercury residues in their water, air and land, constrained access to water, and the livelihood impacts from degradation of land and water in the largely agrarian area. The Requestors also allege that the ruling party, African National Congress, is set to reap major profits from the loan through its investments in Hitachi Power Africa. The Requestors question the fundamentals of the project stating that it is to secure uninterrupted electricity for large corporations, such as smelters and mining houses under secretive special pricing agreements, and that it is not for the millions of poor people who cannot afford or do not have access to electricity. They believe that the AfDB failed to consider communities consultations and participation in its assessment of the project, claiming that local communities, who live close to the power plant were subjected to removals and the destruction of ancestral graves.

Another complaint regarding the same project was submitted to the World Bank's Inspection Panel on 6 April 2010 (Case 65, South Africa: Eskom Investment Support Project).

Case Status and Findings:

On 16 Feb. 2011, the Board considered the Eligibility Report (not available online) and asked for revised ToRs for a compliance review. On 21 June 2011, the Boards of Directors met to consider the "Reassessment and Revision of the Terms of Reference for the Compliance Review of the Medupi Power Project, Republic of South Africa". This Reassessment was prepared by the IRM Roster of Experts and the Director of CRMU. At the 21 June 2011 meeting, the Boards of Directors requested the IRM to revise the Reassessment in light of the recorded Highlights of the Boards discussion of 16 February, 2011 and to resubmit revised terms of reference for the compliance review for consideration by the Boards on a lapse-of-time basis. The revised reassessment and ToRs were presented to the Board on 6 July 2011.

The revised reassessment states that first, **with regard to the eligibility of the requestors**, the requestors demand for keeping their identity confidential; however, that does not mean that they are anonymous complainants. The IRM has met with the requestors and verified their eligibility based on the same tests of prima facie evidence that would have been applied to any other "non-confidential" requestor. The alleged potential adverse harm caused by the project has also been verified by other affected people showing that the concerns raised in the request for compliance review of the Medupi Power Project are shared with many other individuals and groups of people in the project impacted area. Accordingly, the IRM maintains its determination that the requestors are eligible to submit a request for compliance review.

Second, on the **eligibility of the different issues** (complaints) of the request, the IRM acknowledge that the allegation expressed under complaint no.4, while framed as an issue relating to procurement, in fact, raises allegations of fraud and corruption. Thus, as suggested by many Board members, this complaint could be better addressed by the department of the Bank entrusted with the necessary authority and competence to investigate allegations of fraud, corruption and misconduct. The IRM understands that this is the preference of the majority of the members of the Boards. Given this situation and the fact that the Request, itself, also suggests that this issue could be referred to another relevant department within the Bank, the IRM recommends that the Boards should not authorize an investigation by the IRM of complaint no.4.

With regard to complaint no.6, which claims that the poor people will not benefit from the project, the IRM, after careful consideration of the various views expressed at the meeting of the Boards of Directors, has concluded that this complaint shall not be investigated by the IRM.

With regard to the eligibility of the other four issues (complaint no. 1, 2, 3 and 5) for which the Boards did not disagree with the IRM recommendations, the IRM continues to maintain that they are eligible for compliance review as the concerns raised are relevant to the Bank's policies and procedures. Therefore, in accordance with Paragraph 46 (a) of the IRM Rules, it recommends the Boards of Directors to approve on lapse-of-time basis the investigation by the IRM of the following issues raised by the Requestors:

1. (Issue 1 and 2 in the Request): The Requestors allege that the Bank has not complied with its rules and policies in terms of promoting clean sustainable energy projects, and they express concern of the project's impact on South Africa's carbon reduction commitments, scaling up of investment in renewable energy technologies, and the efforts to deal efficiently with the threats of climate change.
2. (Issue 3 in the Request): The Requestors state that the communities living near the Medupi plant will bear the burden of hidden costs in terms of health impacts from air pollution, elevated SO_2 levels, and mercury residues in their water, air and land; constrained access to water; and the livelihoods impacts from degradation of land and water in the largely agrarian area.
3. (Issue 5 in the Request): The Requestors state that the Bank failed to consider community consultations and participation processes in the assessment of the project, and that local communities, who live close to the power plant were subjected to removals and the desecration of ancestral graves, which they say demonstrated a gross violation of their cultural and human rights.

The IRM is recommending an investigation of the above issues because it finds, pursuant to Paragraph 44 of the IRM Rules, that there is *prima facie* evidence of harm or threat of harm by a Bank Group-financed project and that the harm could be caused by the failure of the Bank Group's Management and staff to comply with the applicable Bank Group's policies and procedures.

The CR was conducted by 2 IRM Experts, Professor Daniel D. Bradlow and Dr. Richard E. Bissell.

The CR Report of 19 December 2011 begins with pointing out that the **lessons that can be learned from this compliance review are particularly pertinent owing to two unusual aspects to this loan**.

First, the Bank only became directly engaged in Medupi after the design of the project was completed and the implementation phase of the project had begun. Consequently, the Bank was not able to discuss its applicable policies and practices with the borrower at a time when the borrower could easily adjust either its own practices or, if necessary, aspects of the project to ensure compliance with Bank policies and procedures. This situation created significant challenges for Bank Management and staff in regard to ensuring compliance with applicable Bank policies and procedures, which in turn, increases the reputational and operational risks to the Bank associated with such a complicated project. It also underscores the importance of the Management and staff's compliance with all applicable Bank policies and procedures in their assessment of the project before the decision to lend was taken and in their monitoring of the project after the loan was made.

Second, many of the key decisions affecting the environmental and social impacts of the Medupi power plant – notably those relating to augmented water supplies for the power plant and the installation of flue gas desulfurization units that are designed to reduce the emissions from the power plant – are postponed until after the plant begins operation. This postponement adds a level of uncertainty to the project that complicates any efforts to assess the project for compliance with applicable Bank policies and procedures. This aspect of the project also increases the importance of the Management and staff's compliance with all applicable Bank policies and procedures in their assessment of the project and in their monitoring of the project after the loan was made.

In addition, the World Bank Inspection Panel has received a request for investigation of the World Bank's loan to Medupi that raises similar, but not identical, issues to those raised in the request received by the IRM. In the interests of efficiency, the IRM and the World Bank Inspection Panel, as they had done in the case of the IRM's investigation of the Bujagali Project, signed a Memorandum of Cooperation that provided for the two parties to share information learned in the course of their respective investigations, subject to suitable safeguards of their respective independence and confidentiality requirements.

Climate Change and Related Environmental Issues

The concerns raised by the Requesters about the climate change and environmental aspects of the Medupi project relate to (a) the compliance of the Bank with the promotion of a "clean sustainable energy sector," (b) adequacy of the social and environmental studies done regarding the assessment of cumulative impacts; and (c) the linkages between this project and the Bank's and Borrower's approaches to climate change.

Clean Energy Systems

While the Bank does not currently have a specific climate change policy, it does have other policies and position papers that establish the Bank's approach to this issue. The Bank's policies on energy and environmental assessments – Energy Sector Policy (1994), Environmental and Social Assessment Procedures for African Development Bank Public Sector Operations (2001); Environmental Assessment Guidelines; and Policy on the Environment (2004) – are applicable to Category 1 projects like Medupi. **The Bank's Clean Energy Investment Framework (CEIF), approved in March 2008, is another Boards-approved document applicable to this issue**. It calls for priority action by Management and staff in:

- Mainstreaming of clean energy options;
- Promoting investments in energy access and cleaner energies;
- Playing a catalytic role in resource mobilization.

Overall the CEIF has a thematic priority of "increasing access to clean energy." By that, the Framework appears to mean that solutions are needed for "meeting the basic energy needs of the poorer communities." The connection between energy and climate change has been stated in numerous Bank documents. In particular, the Policy on the Environment stipulates that energy is a critical factor in achieving its objectives, as is indicated by the various Policy provisions listed above. Thus, the Policy on the Environment is clearly applicable to a Category 1 project, such as a large coal-fired power plant in South Africa. As noted in the Appraisal Report Technical Annexes, South Africa has the 8th largest per capita emissions of CO_2 in the world, and 70% of its emissions come from the energy sector. **In this case, where the potential damage to the environment is so significant, the Policy on Environment becomes a key factor in measuring staff and Management compliance with all the policies applicable to the Bank's engagement in an energy project.** It is for this reason that the Policy on the Environment, stipulates, as noted above, that Management should engage in "close supervision." Yet none of the supervision missions before the most recent October 2011 delegation had an environmental specialist on the team, despite the commitment made in the Appraisal Report Technical Annexes.

The Bank's growing commitment to promoting clean energy is also shown in two other developments at the Bank that are relevant to Medupi. First, the Bank, whose current policy on energy, 1994 Energy Sector Policy, is old and does not adequately deal with the new challenges of clean energy and climate change, is committed to updating the Energy Sector Policy. In fact, this policy is designed to facilitate the Bank engaging in new energy generating projects, like Medupi, in its member countries. In 2011 it issued a **draft new energy sector policy** for public comment. While that draft policy has not yet been approved, its key principles would represent a change in emphasis for the Bank. Second, the Bank addresses the question of clean energy in the context of the **Southern Africa Regional Integration Strategy Paper, 2011-2015 (RISP)**, considered by the Boards and issued in April 2011, where Focus 1.2 on regional energy development states that "the proposed strategy in the energy sector will promote the development of clean and climate-friendly energy resources." For the use of coal, the Paper sets a high standard, namely, that the clean coal process will be one "through which pollutants resulting from the burning of coal are captured and stored, instead of released as greenhouse gases."

The Medupi Project demonstrates the tensions between the energy supply goals and the environmental policies of the Bank. While the Bank recognizes the urgent need for energy projects in Africa and is keen to assist its Regional Member States satisfy this need, it also recognizes that these projects have potentially serious adverse environmental effects. It has not, however, established a policy that clearly addresses this tension and offers Management and staff guidance on how to deal with it within the context of Bank operations. **This results in Management being placed in a difficult situation and, in effect, means that the Bank is only able to partially comply with all the requirements of the applicable policies in a complex energy project, like Medupi**. The Panel therefore finds that the Management failed to fully comply with the applicable environmental and energy policies of the Bank.

Recommendations

- An environmental specialist should be included in all future supervision missions to ensure progress on safeguard measures not yet completed at the time construction began. Such participation is needed to ensure that the commitments made in the Technical Annexes to the Appraisal Report are met and should involve more than checking boxes on compliance with DEA permits. Further, consideration should be given to including other staff, for instance, from the Departments in charge of climate change in the supervision missions who can bring a focus on that issue to the dialogue with the borrower.

-The **Bank should complete expeditiously the revisions of the Energy Sector Policy, keeping intact the current draft language that "The Bank will integrate energy dimensions in relevant sector policies, strategies and operations." The Bank also needs to ensure that its energy policy is consistent with its existing environmental policies and related policies at its partner multilateral development banks**.

Cumulative impacts

The Policy on the Environment (2004) reflects a growing concern with cumulative impacts. Section 6.8 calls for the Bank to develop Strategic Environmental Assessments (SEA) that would allow "consideration of more far-ranging and cumulative impacts and broader types of alternatives than provided by a more traditional, project-specific EIA. In addition, an SEA can help facilitate consultations with the public by identifying issues, initiating baseline data collection, and developing action programmes." The same idea is elaborated in the Environmental and Social Assessment Procedures for African Development Bank's Public Sector Operations paper (2001). It provides extensive guidance for staff in the case of large, complex loans with system-wide impacts.

Medupi is the second power plant in the Lephalale area, with potentially more plants to come, and the Bank's Strategic Impact Assessment Guidelines indicate that the project appraisal should include a cumulative impact assessment of multiple projects in an area. Several specific aspects of this project suggest the value of a cumulative impacts assessment in this case. Cumulative impact analysis in most countries suffers in that the EIA "is primarily a permitting instrument and the EIA process results in a permit with conditions for which the applicant is responsible," and thus "it is very difficult to include detailed assessment of impacts not under the control of the applicant." In the case of Medupi, despite the applicable Bank policies, the involvement of the Bank has not led to correcting this deficiency. Instead the project sponsor and the Bank have relied either on the "Environmental Management Framework" initiative – outlined below for this case – or on post hoc directives from the DEA (South African Department of Environmental Affairs) to undertake remedies after damage is detected in the operation of the plant. Neither remedy is fully satisfactory in timing or timeliness owing to their occurring after and outside the EIA. Overall, one can say that the Bank is sensitive to this issue, and is at least experimenting with better approaches that may over time result in improved practice. It is noteworthy that the Bank has now indicated modest concern about cumulative impacts by joining the World Bank in sponsoring a study of regional impacts of pending energy projects on the Botswana-South Africa border. Given current plans for coal powered plants in both countries, the report estimates that there will be more than 17,000 MW in a sub-region 150 miles each side of the two countries' borders. As the report states, it is unlikely individual EIAs will be able to fully analyze the cumulative impact of such a surge in coal for power purposes. This study, unfortunately, will only be undertaken in the midst of major project-funding decisions and at a time of apparently urgent power shortages.

It is important to note that the issues of cumulative impacts has also been partially addressed in the DEA-initiated spatial development framework. This approach to the problem of cumulative impacts was endorsed in the 2008 study of EIAs, as a key integrative step in avoiding "unnecessary impacts at especially local level as they should discourage applications in areas that are not suitable for such applications." In this case, the DEA took the initiative to launch a seminal report on the development of the Waterberg District, in partnership with the Limpopo Department of Economic Development, Environment and Tourism and the Waterberg District Municipality. This report highlighted the scarcity of water as the most important constraint on development of the region and that there is overwhelming concern throughout the district over breakdown of infrastructure. The roles played by Medupi and its related large-scale requirements thus increase anxiety in the community about the potential deterioration in the environment.

The Bank complied with the letter of the applicable policies on Environmental Impact Assessments. However, it **chose to avoid an invitation in the policy to undertake a more thorough approach that would have recognized the regional and trans-border effects** of the Medupi loan on overall environmental loads.

Recommendation

- **Management needs to include, in its supervision, close monitoring of economic, social and environmental changes in the air and water quality regions around Medupi** to ensure that (1) the results of follow-up studies and outreach exercises such as the EMP are fully incorporated into the criteria for monitoring, and (2) initial compliance is not eroded by measures beyond the immediate purview of the power project.

Climate change

The Boards discussed and adopted the paper, **"Bank Group Climate Risk Management and Adaptation Strategy" (CRMA)** in March 2009. The commitments in this Bank paper are extensive, e.g.:

- "Climate-proofing investments will include actions to ensure that development efforts are protected from negative impacts of climate change, climate variability, and extreme weather events and to ensure that climate-friendly development strategies are pursued to delay and reduce damages caused by climate change." (para 3)
- "Task managers in each Operations Complex department will carry out a quick screening of project and programme proposals using computer based tools to identify country, region and sector, specific climate risks during project design." (para 4)

The Bank's policies on environmental assessments -- Environmental and Social Assessment Procedures for African Development Bank Public Sector Operations (2001); Environmental Assessment Guidelines; and Policy on the Environment (2004) -- are also relevant to climate change. The Bank's **Clean Energy Investment Framework (CEIF)**, approved in March 2008, is also a Boards-approved document applicable to this issue.

The failure to address the CRMA in the Appraisal Report is noteworthy because of the obvious climate change implications of the Medupi project. The stated purposes of the CRMA (approved by the Boards on 29 April 2009) are two-fold: (1) to reduce vulnerability within the RMCs to climate variability and promote climate resilience in past and future Bank-financed development investments; and (2) to build capacity and knowledge within the RMCs to address the challenges of climate change. Among the various tools laid out in the CRMA, the first is most relevant to the Medupi project: "Climate proofing investments" in a way that will "ensure that development efforts are protected from negative impacts of climate change, climate variability, and extreme weather events and to ensure that climate-friendly development strategies are pursued to delay and reduce damages caused by climate change." The strategy paper goes on to say that "the implementation of the Bank's CRMA will be mainstreamed in all aspects of operations." In this regard, it is unfortunate, for example, that, with regard to specific "climate proofing" of the project, the Appraisal Report never discussed the possibility of significant climate change-related reductions in precipitation in the region of Medupi, which could have a major impact on the Medupi plant, its anti-pollution components and associated facilities. However, the fact that the Bank has approved two high-profile investments in wind and solar energy, in vague association with Medupi, is a positive development, and points the way to beginning implementation of the Bank strategy paper. The CRMA also calls for regional integration of the issue. This issue was entirely absent in the presentation of the project to the Boards by Management.

The Bank failed to comply with all applicable policies in regard to the climate change issue. The criteria of the CRMA were never cited in the documentation with analysis of the project, despite the Bank's obligation to "mainstream" the CRMA in all operations.

Recommendation

- Management should carry out the steps described in the CRMA to ensure strong monitoring of the project: (1) all reports of supervision missions should report on progress in achieving progress on climate change; and (2) monitor country level outcomes as relates to climate change resilience. On the latter issue, **special attention should be given in reports on water status in the region important to Medupi**.
- **The CRMA states that the Bank will be replacing the Environment and Social Impact Assessment (ESIA) guidelines with a new more comprehensive Environment, Climate, and Social Impact Assessment (ECSIA) to be able to take climate considerations more fully into account. Now, more than two years later, Management is still drafting an approved ECSIA framework and needs to go through a public consultation phase. The Bank should complete and issue the ECSIA framework expeditiously**.

Local Environmental Issues Related to Air and Water

The requesters complained that "communities living near the Medupi plant will bear the burden of hidden costs in terms of health impacts from air pollution, elevated sulfurdioxide (SO_2) levels, and mercury residues in their water, air and land; constrained access to water; and livelihood impacts from degradation of land and water in the largely agrarian area." This view was expressed not only in the Request but also in both informal conversations with the Panel and in local official documentation. There is a widespread fear that the Matimba power plant is already causing and will continue to cause deteriorating health status throughout the Lephalale area. The local residents expect the Medupi plant to exacerbate the problem. Their fears take two forms – the air and water quality deterioration associated with Medupi and its health implications, particularly on respiratory health, and on HIV/AIDS prevalence. In regard to the latter issue, the most recent Integrated Development Plan for Lephalale municipality (2010-11) stated that "Lephalale has a relatively high-level of infection if compared to other parts of South Africa." This is particularly notable since Limpopo Province has the third lowest level of all of the provinces in South Africa. Most local people attribute the raised Lephalale rate to the presence of mining operations and the large number of immigrant construction workers.

Air pollution

The Policy on the Environment (2004) includes numerous provisions dealing with point-source pollution possibilities. As a Category 1 project, the overall standard applicable to Medupi requires assessment of any pollution source that is "likely to induce important adverse environmental and/or social impacts that are irreversible, or to significantly affect environmental or social components considered sensitive by the Bank or the borrowing country." It goes on to say that the environmental assessment "recommends any measures needed to prevent, minimize, mitigate or compensate for adverse impacts and to enhance environmental and social project benefits." Many of the key procedures required for Bank-financed projects can be gleaned from the Environmental and Social Audit Guidelines, as well as the Environmental and Social Assessment Procedures for the African Development Bank's Public Sector Operations. While it is not possible to find data on respiratory illness rates, it is clear that there is substantial air pollution in the rural area around the proposed Medupi plant. A recent inventory of likely sources of pollutants in the area that could aggravate respiratory illnesses was extensive. This review of policy compliance with regard to local and immediate environmental issues covers two aspects: the dramatic impact of environmental disruptions during the construction phase, and then the long-term impacts of the operation of the power plant. **While an outside observer might consider the latter impacts to be ultimately more damaging, experience with compliance assessments demonstrates that the short-term, current impacts from the construction process causes much more intense concern among the people in the affected communities**. The Bank needs to assess compliance in each phase of the project.

SO_2 emissions: Many aspects of the challenge of limiting SO_2 emissions are based on future conditions, both within the power plant and in associated facilities. For example, the requirement to install flue scrubbers in the DEA permit is based on the possibility that future monitoring may indicate "non-compliance with ambient SO_2 standards." Under national regulations, the plant can operate for eight years under the 1998 standards, but will then have to upgrade to meet the new 2009 emissions standards. Nevertheless, Eskom does not plan to install flue scrubbers until significantly more water is available, which it is expecting to receive from water allocations from the proposed Mokolo-Crocodile Water Augmentation Project (MCWAP) in addition to the expanded drawdown from Mokolo reservoir. This means that the Department of Water Affairs (DWA) will play a critical role in determining the timing for deployment of these wet scrubbers to meet the South African environmental requirements with regard to SO_2. Unfortunately, it is not clear that the proposed MCWAP to bring water from the Crocodile West catchment area to the Lephalale region will go ahead. As of December 2011, the Department of Water Affairs had not made a determination to go forward with the MCWAP. The Department was awaiting decisions on the part of other potential industrial users of Crocodile River water before making a commitment. **If the DWA does not decide to proceed with the MCWAP by early 2012, Medupi may not receive adequate access to water in time to begin installing the FGD technology by its preferred date in 2019**. The time at which Eskom will need to install the scrubbers will depend on the air monitoring systems required by the DEA in the permit to proceed with the project.

The people of Marapong, living in the shadow of Matimba and a few kilometers from Medupi, are understandably nervous that the SO_2 emissions are causing the ill health among a population already exhibiting below acceptable health status as a result of their poverty. The lack of good public data on respiratory illness rates in the area exacerbates their concerns. This indicates the need for a credible process for monitoring and reporting SO_2 emissions. It is important to note that **Eskom is not trusted** by some people in the community to provide honest data, making it even more imperative to bring in the visible "independent party" specified by the DEA permit. Furthermore, **Eskom does little on its own to proactively make monitoring data public** – saying only that it is available "on request" – when much could be gained by providing publicly understandable summary reports in local languages and local media to educate the public about environmental challenges in their communities on a real-time basis. **This suggests that the monitoring process should be undertaken by and be the responsibility of an independent party**. The flue gas desulfurization process faces resource challenges in addition to the issue of water availability. Current technologies for FGD are not environmentally benign. Most importantly, it is a highly resource intensive process. The FGD process requires, in addition to large amounts of water, a systems approach that ensures adequate supplies of lime sorbent and effective transport and gypsum disposal systems. Any one of these would be a stress on the local environment; all three mean that there is a massive regional challenge to meet all aspects of installing and operating FGD units at Medupi. The Executive Summary of the ESIA for Medupi provided to the Boards by Management noted that "local and international air quality limits given for SO_2 were predicted to be exceeded for hourly and daily averaging periods within the zone of maximum impact." Indeed, the limits are already exceeded on occasion by the nearby Matimba power station operating alone. This means that the addition of Medupi will inevitably add to the already high air quality burden. The permit to proceed with construction includes a specific condition: "Eskom shall install, commission and operate any required SO_2

abatement measures that may be necessary to ensure compliance with any applicable emission or ambient air quality standards published in terms of the National Environmental Management Air Quality Act, 2004 (Act No. 39 of 2004)". Those standards are spelled out in the National Framework for Air Quality Management (2007). As noted above, Eskom will not be installing FGD scrubbers soon for a number of reasons. The DWA's recent announcement of the "postponement" of the MCWAP, therefore, raises serious concerns about the likelihood of the scrubbers being installed as planned. It has also left the community bewildered about the long-term intentions of the DWA to cooperate with Eskom on this essential infrastructure support, which in itself can undermine social and economic developments in the Lephalale area.

The Bank has complied with the applicable policies and procedures with regard to the analysis included in the PAR and related environmental analysis. The real test of compliance on this issue, however, is not during the construction phase – rather, the Bank will have to ensure follow-up supervision during the operational phase when the issue of FGD scrubbers will have to be addressed.

Recommendation

- The Bank needs to pay close attention, during upcoming supervision missions, to the question of how Eskom, DEA and DWA resolve the water availability issue and decide on the ultimate installation schedule for the flue gas desulfurization units. That is an explicit condition of the financing agreements with the African Development Bank.

Nitrogen Oxides: The Record of Decision from the Department of Environmental Affairs and Tourism for this project appropriately raised the question of NO_x as a greenhouse gas. While the projected emissions from Medupi are under current limits, the question of regulating nitrogen as a particularly damaging greenhouse gas (on a weight basis, worse than CO_2) is becoming more prominent. It is thus appropriate that the DEA requires continuous monitoring of nitrogen oxides in its approval document. The Bank Management and staff complied with the Policies on climate change, environmental monitoring, and greenhouse gases that are applicable to the issue of NOx emissions. Continuing compliance, however, will involve monitoring both the quality of on-site air measurement systems and potential changes of national/international standards to respond to the climate change implications of large-scale emissions.

Mercury emissions: In the absence of any current controls of SO_2 and NO_x, it should be pointed out that the South African DEA expressed concern in issuing its permit about tracking the mercury emissions from the rapidly escalating use of coal for energy production. This is not surprising, given the toxic nature of mercury emissions, and the fact that coal-burning power plants are the principal environmental source of such emissions, making it essential to continue to monitor this element. The Environmental Impact Assessment was drafted and approved before the current round of work was undertaken by the South African Mercury Assessment, and thus did not have the benefit of drawing on important ongoing work to trace the pathways from coal-burning to human health hazards. The Bank Management and staff complied with the policies on climate change, environmental monitoring, and greenhouse gases that are applicable to the issue of mercury emissions. Nevertheless, the more recent work on mercury emissions and transport by South African researchers warrants special attention by Bank supervision missions so that they receive an update on the incorporation of new research into project oversight.

Recommendation

- The Bank should review the pending Environmental Management Plans, particularly for the operational phase, to ensure that the emission monitoring plans reflect the latest findings with regard to mercury, and if necessary, bolster the tracking of such emissions from Medupi, and on a cumulative basis from the Waterberg region.

Water access

The Requestors raise concerns about constrained access to water from operation of the power plant, as well as damage to traditional sources of water in the Mokolo River from allegedly unlawful sand dredging for construction purposes. Management states that the project falls within the Mogolo River Catchment, which drains into the Limpopo River. Water from this catchment is largely used for agriculture (87%) and the rest by industry, mining, power generation and domestic activities. With the planned development activities in this area by the provincial government, water demand by industry, mining, and power generation will increase. In order to ensure adequate water for the power plant and water for other users, the loan agreement stipulates that Eskom is required to obtain water permits from the Department of Water Affairs (DWA) for expanded access to water from the Mokolo Dam (Mokolo Dam Phase 1) and the integrated water permit for access to the anticipated Phase 2 of the MCWAP that will transfer water from the Crocodile River to the Steenbokpan-Lephalale corridor. In addition, Eskom should develop boreholes. On that basis, Management is satisfied that the water availability issue has been addressed.

The Bank has two key policies applicable to this sector: the Policy on the Environment (2004) and the Integrated Water Resource Management Policy (2000) (IWRMP). The IWRMP requires the Management to ensure that adequate attention is paid to the protection of aquatic ecosystems. In this case, there are multiple aspects of the project that affect, or are affected by, the water situation in the region. The Policy on the Environment is of particular relevance in ensuring that known and pending water issues are integrated into broader environmental concerns as the project is implemented. For instance, paragraph 6.30 states that "Based on the outcomes of the ESA studies, OPs will prepare loan conditions and covenants to cover any outstanding environmental concerns that need follow-up during project implementation. For Category 1 projects, the inclusion of conditions and/or covenants in loan documents shall ensure an effective compliance with the Bank's environmental policies (e.g. submission of resettlement plans, creation of monitoring units, stakeholder consultations, etc.). For Categories 1 and 2 projects, OPs shall ensure that the ESMP is incorporated in the loan agreements."

The work on regional environmental assessment, and particularly on the Limpopo Water Management Area, concludes that a negative balance (use over availability) already exists, will get worse by 2015 with current planned use, and could be exacerbated both by natural causes (climate change and declining river flow) and by manmade causes (a decision to install wet scrubbers in the Medupi project to control SO_2). The latter eventuality would more than double the water needs for the Medupi plant. Eskom argues that there is ample water from current and projected sources. To obtain the necessary volume of water to begin operations, Eskom is planning to draw down water at the Mokolo Dam (likely to mandate forced reductions in allocations for traditional users within a few years of commencing operations). It expects to obtain additional water from the anticipated construction of the MCWAP, a large, expensive diversion from the adjacent Crocodile basin. However, the Department of Water Affairs, which has not yet decided to go ahead with MCWAP, appears reluctant to authorize this project until it has a 100% guarantee of uptake by potential users. As is typical in these permitting processes, the Eskom projections assume that the other water uses will remain unchanged and that there is no downside risk to future precipitation levels, even though it is well-recognized that the last four years have enjoyed well above-average precipitation. However, other planning documents actually project a doubling of population in the area in coming decades as well as additional mining/industrial users of water, such as other new coal mines and power plants., Such eventualities would undermine the projections by Eskom for accessing water. Eskom could be forced to sequester water rights currently supporting farming in the area. The social and economic impacts of such prospective transfers have not been calculated. In addition, **it is not clear that the Bank has been monitoring this issue in its supervision of the project**. In fact, given this challenging situation, it is surprising that in the most recent supervision mission, Bank staff did not even meet with the Department of Water Affairs.

The Bank is not in compliance with all applicable policies. It failed to explain in the PAR how it complied with the Integrated Water Resource Management Policy in its appraisal of the project. In addition, the Loan documentation lacks sufficient specificity to ensure compliance with Bank policies. The only reference to the water issue in the Loan Document is a requirement for the Borrower to show a permit for the two phases of water allocation from the DWA, and that condition has not been fulfilled.

Recommendations

- The Bank should ensure that there is adequate participation by appropriately qualified technical experts in future supervisory and monitoring missions to conduct discussions with appropriate counterparts on the water availability issue. It is important to note that this issue must be resolved by early 2012 if Eskom is to meet the deadlines for installing the SO_2 scrubbers.
- The Bank should ensure that there is adequate participation by appropriately qualified technical experts in future supervisory and monitoring missions to conduct discussions with appropriate counterparts on the evolving Environmental Management Plans. The current plans (both construction and operations) are in the process of revision. There is no evidence that they have been reviewed by Bank staff.

Land and Water Degradation

The Bank policy applicable to this issue is the Policy on the Environment. Land and water degradation can take many forms in such a project. The EIA classifies this possibility as a "high risk" on this project. In addition, the FGD technology, if installed, generates two major waste streams. It generates waste water that can only partially be recycled; the remainder has to go somewhere. It also produces large quantities of gypsum that cannot be absorbed by the gypsum market in southern Africa. Disposal of gypsum on the site around Medupi can by itself create serious fluoride pollution. The Panel finds that the evidence of water and land degradation, if it occurs, will not be clear until the power plant is operational. Consequently, it is not possible to reach a firm conclusion about Bank compliance with the applicable policies before Medupi becomes operational. **The role of Bank supervision missions at that time will be crucial for ensuring the compliance** of the project with Bank policies.

Consultation with the Community and Cultural Rights

The Requesters state that "the Bank failed to consider community consultations and participation processes in the assessment of the project, and that local communities, who live close to the power plant were subjected to removals and the desecration of ancestral graves, which they say demonstrated a gross violation of their cultural and human rights."

The Management states that the extensive community consultations conducted during the environmental and social impacts assessment process were in line with South Africa's law and the Bank's requirements.

The Bank policies applicable to this issue are: the Environmental and Social Assessment Procedures for African Development Bank's Public Sector Operations (June 2001); Policy on the Environment (February 2004); Involuntary Resettlement Policy (November 2003); **Handbook** on Stakeholder Consultation and Participation in AFDB Operations (2001); and the Gender Policy (2001).

It is clear from the EIA that an extensive effort to engage in public consultations was made by the borrower. Nevertheless, it is striking that all the members of the community whom the Experts met at the project site, including community leaders, raised lack of consultation as one of their primary concerns about the project. The assertions of lack of knowledge about the consultations were most emphatic in the case of the representatives of the Maropong community and of the traditional leadership in the project area. These communities include the poorest and most disadvantaged people in the project area. The Panel notes that **neither the languages of the medium used to inform people about the public consultations** (English and Afrikaans language newspapers) **nor the languages of the written submissions** (English and Afrikaans) **are the languages spoken by the majority of people in the area**. The Panel finds that the Bank staff's appraisal of the consultation efforts did not comply with the Bank's policies' requirement to ensure that the efforts at public consultation incorporated all affected populations groups, particularly the poor and the marginalized. In particular, the Bank staff failed to comply with the Bank's Policies on the Environment, Involuntary Resettlement, and Gender; and the Environmental and Social Assessment Procedures for African Development Bank Public Sector Projects. They also did not follow the procedures for assessing consultation stipulated in the Handbook on Stakeholder Consultation and Participation in AFDB Operations. The Bank's failure to comply with the applicable policies is particularly noteworthy in this case. As indicated above, the deficiencies of these consultations were clear from a careful reading of the ESIA and its annexes. The consequences of the Bank's failure to comply with its own policies and procedures in regard to consultation is that it may have under-estimated the full range of the adverse social impacts of the project, particularly its impacts on poor and vulnerable population groups. Given the complex legacy issues in South Africa, this is a significant oversight.

Graves

The Requestors contend that, while there may only be two "formal" grave sites in the project area, there are likely to be unmarked graves scattered over the project area. They base this contention on the fact that the local communities are poor and, over generations, have been forced to move around the area. They contend that better consultations could have mitigated this risk.

Management maintains that there are only two graves in the project site, both of which the borrower dealt with appropriately.

The Bank policy applicable to this issue is the Involuntary Resettlement Policy (2003).

The Resettlement Policy requires the Bank staff to pay careful attention to the needs of disadvantaged groups, who may not have formal title to land but may attach a special significance to particular pieces of land. This requirement is particularly pertinent in this case because of the history of the region and of forced relocations in South Africa. In fact, the Experts were informed that the culture of the local communities accepts that people can become separated from the physical location of the graves of their ancestors and allows for the possibility of a symbolic relocation of the ancestor's graves. Unfortunately, there is nothing in the record to indicate that **the borrower** engaged in consultations with the local community about either the existence of symbolic graves or land claims. Similarly there is nothing to indicate that the **Bank staff**, in their evaluation of the project made any effort to assess these issues and so to ensure that the project was fully compliant with the relevant policy. The Panel finds that the Bank was not sufficiently rigorous in its assessment of this policy to determine either that no graves that had been or could have been desecrated by the Medupi project or that the borrower had established adequate procedures to consult with the community about the existence of either physical or culturally significant gravesites that were vulnerable to desecration by the project. Moreover, it notes that the Bank cannot be sure that it has avoided the risk of being inadvertently complicit in depriving the local community of their historical lands without further consultations with the local communities.

Recommendations

1. An environmental specialist should be included in all future supervision missions to ensure progress on safeguard measures not yet completed at the time construction began. Such participation is needed to ensure that the commitments made in the Technical Annexes to the Appraisal Report are met and should involve more than checking boxes on compliance with DEA permits. Further, consideration should be given to including other staff, for instance, from the Departments in charge of climate change in the supervision missions who can bring a focus on that issue to the dialogue with the borrower.
2. **The Bank should complete expeditiously the revisions of the Energy Sector Policy**, **keeping intact the current draft language** that "The Bank will integrate energy dimensions in relevant sector policies, strategies and operations." The Bank also needs to ensure that its energy policy is consistent with its existing environmental policies and related policies at its partner multilateral development banks.
3. Management needs to include **in its supervision, close monitoring of economic, social and environmental changes** in the air and water quality regions around Medupi to ensure that (1) the results of follow-up studies and outreach exercises such as the EMP are fully incorporated into the criteria for monitoring, and (2) initial compliance is not eroded by measures beyond the immediate purview of the power project.

4. Management should carry out the steps described in the CRMA to ensure strong monitoring of the project: (1) **all reports of supervision missions should report on progress in achieving progress on climate change**; and (2) monitor country level outcomes as relates to climate change resilience. On the latter issue, special attention should be given in reports on water status in the region important to Medupi.
5. The CRMA states that the Bank will be replacing the Environment and Social Impact Assessment (ESIA) guidelines with a new more comprehensive Environment, Climate, and Social Impact Assessment (ECSIA) to be able to take climate considerations more fully into account. Now, more than two years later, Management is still drafting an approved ECSIA framework and needs to go through a public consultation phase. The Bank should complete and issue the ECSIA framework expeditiously.
6. The Bank needs to pay **close attention, during upcoming supervision missions, to the question of how Eskom, DEA and DWA resolve the water availability issue** and decide on the ultimate installation schedule for the flue gas desulfurization units. **That is an explicit condition of the financing agreements with the African Development Bank**.
7. The Bank should review the pending Environmental Management Plans, particularly for the operational phase, to ensure that the emission monitoring plans reflect the latest findings with regard to mercury, and if necessary, bolster the tracking of such emissions that source from Medupi, and on a cumulative basis for the Waterberg region.
8. The Bank should ensure that there is adequate participation by appropriately qualified technical experts in future supervisory and monitoring missions to conduct discussions with appropriate counterparts on the water availability issue. It is important to note that this issue must be resolved by early 2012 if Eskom is to meet the deadlines for installing their SO_2 scrubbers.
9. The Bank should ensure that there is adequate participation by appropriately qualified technical experts in future supervisory and monitoring missions to conduct discussions with appropriate counterparts on the evolving Environmental Management Plans. The current plans (both construction and operations) are in the process of revision. There is no evidence that they have been reviewed by Bank staff.
10. The Bank, not having had an opportunity to conduct a timely review of the initial EMP, should use the opportunity created by the drafting of a revised EMP to **fully assess the compliance of the many water, air, and land issues treated by the Plan with the requirements in the applicable Bank policies**. Equal attention should be paid by Bank staff to the pending operational EMP that is currently under review in Eskom and DEA. **Many issues come under the heading of resource degradation, and the most effective Bank tool to address them is the Environmental Management Plan. For that reason the EMP plays an important role in the Bank's Environmental Policy. The borrower has informed the Panel that a new construction EMP has been put through processing, including approval by the DEA**.
11. The IRM recommends that the Boards require Bank Management and staff to undertake the following actions in order to correct its failure to comply with the applicable Bank policies on consultation:
- The Bank requires the borrower to ensure that there is adequate representation from all sectors of the affected community on its Environmental Management Committee. **The proactive sharing of all environmental information, and particularly monitoring data from air and water sources, with the EMC and the public will ensure that the borrower, all parts of the affected community, and the Bank are informed about all relevant environmental and social impacts and issues related to the project**.
- In all future supervision missions, the Bank staff ensure that they communicate to all relevant sectors of the Lephalale community in a timely and culturally and socially appropriate way that they will be visiting the Lephalale community and invite the community to meet with them to discuss the project or to communicate any information they deem appropriate to the Bank staff. The staff should **then include information on their meetings and communications with the local community in all future reports, aide-memoires and other documentation relating to Bank supervision missions**.

12. The Panel recommends that the Bank take steps to determine, consistent with the requirements of its own policies on participation and consultation, that either there are no graves that have been or are vulnerable to desecration during the construction and operation of the Medupi project or that appropriate compensatory measures have been taken by the borrower to deal with any graves that have been or could be desecrated in the course of the construction and operation of the project. In addition, the Bank should establish that the affected communities do not have any outstanding historical land claims that could be adversely affected by the Medupi project. The implementation of these actions should be monitored and reported on by the Bank staff who participate in future Bank monitoring missions to this project.

The IRM Compliance Review Report was submitted to the President and the Boards of Directors on 24 January 2012. Management sent Response and Action Plan to Boards of Directors and CRMU on June 2012. The Boards discussed the IRM Report and Management Action Plan in September 2012. **At the IRM's request, Management resubmitted an Updated Action Plan in November 2012 for Boards approval**. On 19 December 2012, Boards adopted a decision the Compliance Review Report and Management Response and Action Plan, and directed CRMU and Management to work together to reconcile the factual discrepancies and CRMU to clarify on IRM Monitoring. **Management was also directed to submit an Updated Action Plan**.
Management Updated Action Plan and IRM's Monitoring were approved by the Boards on 13 February 2013.