

South Africa: Eskom Investment Support Project (EISP)
Supervision and Monitoring Program to Date and Going Forward
May 16, 2012

World Bank Commitments regarding Project Supervision and Monitoring

- The EISP is a project of highest strategic importance to the Bank in its relationship with South Africa, its support of sustainable energy development on the African continent, and in its service to a middle income country using its own systems and regulations.
- Given its size and scale, an extraordinarily intense approach to supervision and monitoring is required for the project, which builds on frequent dialogue on project implementation issues; regular supervision missions concerning environmental and social safeguards; consultation with project affected people on the Medupi and Majuba Rail components; and leveraging a global staff both in the field and HQ. This includes review of actions taken by Eskom with communities to address local impacts from the project.
- Using a supervision team that comprises senior and highly experienced staff, complemented by consultants, the overall project will be supervised through the expected project closing on October 31, 2015. After that, the Bank is committed to continue to monitor on an exceptional basis air quality aspects until 2022, twelve months after commissioning of flue gas desulfurization (FGD) for the sixth unit, which is expected to be installed at the end of 2021. This monitoring will enable the Bank to follow up with the appropriate authorities as needed.
- The Bank is also committed to using the same requirements in supervising environmental and social aspects for projects using borrower safeguard systems as for a project using Bank Safeguards, with South African regulations as benchmarks for compliance.
- The Bank is committed to monitoring the project requirement that Eskom provide to the Bank a progress report in mid 2013 on Eskom's most recent designs and schedule regarding the installation of FGD, for which the timing of the completion of the Mokolo Crocodile Water Augmentation Project (MCWAP) Phase 1 by the Department of Water Affairs (DWA) will also be of significant importance.
- The Bank and South African authorities recognize that air quality and water supply are key issues of concern for the project area. The potential risk of impacts pertaining to air quality and water supply will only be verifiable once Medupi begins operations, (expected to begin in 2013, with the last unit coming on line in 2016). Because of this issue, the Bank is committed to monitor: (i) air quality impacts once Medupi starts operations before FGD installation; (ii) progress with MCWAP as it pertains to water supply for FGD and, as relevant, to the adequacy of water supply to Lephalale; and (iii) installation of FGD and the corresponding air quality results.
- The commitment of post-project closing monitoring will be achieved through a review of continuous emission monitoring, annual ambient air quality monitoring reports, and meetings between Bank staff in the Pretoria office and counterparts in Department of Environmental Affairs (DEA) and DWA.¹ (A key source of ambient air quality data readily available to the Bank by that time will be published data on DEA's website for the National Air Quality Monitoring Network, www.saaqis.org.za.)

¹ This commitment elaborates on monitoring-related information contained in the Response and Recommendation of Management.

Bank Observations on South Africa’s Compliance Monitoring and Enforcement for Medupi

- The Bank is committed to a range of supervision and monitoring activities that will help ensure it is kept fully informed about the status of Medupi’s compliance with relevant laws and regulations. To this extent, the Bank will take account of the fact that all decisions regarding Medupi’s access to water, as well as allocations to other users in the region, are controlled by the DWA, which operates under national law that establishes a national policy of priority allocation to Basic Human Needs and Ecological Reserves before any allocation for industrial or agricultural purposes.
- The governing environmental authorization for the project (i.e., the Record of Decision or “ROD”) addresses compliance monitoring and enforcement by the DEA at the national level, and not by provincial or local government. This compliance includes, inter alia, the requirement for the appointment of an independent Environmental Control Officer (ECO) and an Environmental Monitoring Committee (EMC), which includes local community representatives. Both the ECO and the EMC must report regularly to the Director General of DEA and are responsible for compliance monitoring and auditing with respect to the ROD, the Environmental Management Plan (EMP), and applicable environmental regulations.
- The Bank is committed to meet with the ECO during supervision missions to obtain an update on compliance performance.
- Meetings of the EMC are held quarterly and are locally advertised and open to the public. Opportunity is provided for public comment on issues, and minutes of the meeting are recorded and distributed to all participants with regular, follow-up action plans.
- To date, the Bank has attended the most recent meetings of the EMC as part of supervision, and intends to continue to do so.
- DEA has undertaken an assessment of provincial capacity and, on this basis, has delegated the issuance of the Air Emissions License (AEL) to the Limpopo Department of Economic Development, Environment & Tourism.² However, the AEL is issued pursuant to detailed national regulations on air emissions from thermal power plants and associated ambient impacts, with Eskom bearing the full burden of compliance as a pre-condition for AEL issuance and periodical renewal. The provincial authority has limited discretion in issuing the license, and DEA retains oversight and final authority on this decision.
- As part of supervision and monitoring, the Bank will continue to observe and be fully informed regarding issues related to compliance monitoring and enforcement in the context of the EISP, and the Medupi component in particular. To date, the Bank has found generally effective compliance monitoring. For example, DEA’s Environmental Management Inspectorate (EMI) carried out a spot inspection in December 2010, which produced positive news in the local press regarding EMI’s findings on project compliance. The Bank is aware of one alleged issue of noncompliance at the Medupi site during Eskom’s fiscal year 2010/2011, after a DWA site inspection in early December 2010. This was the absence of a Water Use License to use wastewater (mostly wash

² Information regarding the delegation of the AEL to Limpopo was obtained during a recent supervision mission and subsequent to the Response and Recommendation of Management.

water) from the batching plant for on-site dust suppression; the absence of a license for this specific water use was quickly corrected.

Water Supply Management

- The delivery of expanded water supply to the Lephalale-Steenbokpan corridor is a key component of the 2004 National Water Strategy because this area was expected to be a major growth pole for industrial, mining, and agricultural operations, and population expansion. The four-phase MCWAP for the project area was developed from the National Water Strategy.
- It is expected that approximately 49 percent of the available allocable additional water supply from Phase 1 of the MCWAP could supply the full needs of Medupi operations, including the installation and operation of FGD, while protecting the legally-mandated and protected Basic Human Needs and Ecological Reserves, which cannot be drawn upon for industrial or commercial use, even in the event of drought. Construction of Phase 1 began in late 2011.
- To create backup supply DWA has an agreement with the municipality that it can use the treated effluent from the Lephalale municipal wastewater treatment plant for industrial purposes if necessary. DWA has also identified a further backup supply option of extracting ground water from a nearby fault that is generally poor in quality but considered suitable for industrial purposes.

Air Quality Management

- Eskom is required to initiate a program for continuous emission monitoring of ambient concentrations of air pollutants in the Marapong residential area as well as surrounding areas of the power plant and the existing Matimba power station. The Bank is committed to reviewing the ambient air quality monitoring program required of Eskom in the Marapong area.
- The Medupi project Environmental Impact Report (EIR) includes state-of-the-art air quality modeling and risk assessment for health impacts based on the air quality modeling output. In defining and assessing human health risk, the EIR, the DEA, and the Bank team follow the widely accepted and long used definition that risk is a product of hazard and exposure. On December 24, 2009, the Minister of Water and Environmental Affairs issued final ambient air quality standards for South Africa, to take effect immediately, which are consistent with WHO guidelines. Compliance with these standards will be part of the compliance related data and requirements included during project supervision and monitoring.
- DEA is proposing to designate the airshed as a National Priority Area for Air Quality Management as a proactive measure, i.e., before the airshed becomes degraded by future development. This designation is pending Ministerial approval, and in anticipation of that approval DEA has already begun the process of participatory engagement in the development of an Air Quality Management Plan and Threat Assessment. Once this measure is approved, it will be part of the compliance related data and requirements included during project supervision and monitoring.

Eskom Engagement with Communities to Address Local Impacts

In every community in which it operates, Eskom deploys its Corporate Social Responsibility Program. In the case of the Medupi project, 45 million Rand have been budgeted for deployment in the Lephalale area over the next 3 years for use in the program, of which about half is to be spent in rural villages and Traditional Authority Areas, and about 90 percent on health and education-related infrastructure. In addition, Eskom as a corporate good citizen in the Lephalale project area is an important employer and member of the community through its existing operations at the Matimba power station. Beyond the Corporate Social Responsibility Program, Eskom is making additional investments as part of the Medupi construction program in three key areas, as follows:

Local Employment

- Eskom and the Government of South Africa aim to maximize local employment, which is the key issue of concern in the local communities.
- As of October 2011, the Eskom and Government initiatives have resulted in the following:³
 - 14,005 workers on site at Medupi
 - 96 percent are South African
 - 46 percent are from Lephalale and the surrounding area (~50 km radius)
 - 4.2 percent are from the rest of Limpopo Province
 - Over 4,000 employed for the first time
 - Approximately 99 percent of unskilled workers and 58 percent of semi-skilled workers are from Lephalale and the surrounding area, making up 75 percent of the work force in these two categories
 - Workers below the age of 35 constitute about 60 percent of the work force; about 40 percent of these are from Lephalale and the surrounding area.

Public Infrastructure Investments and Improvements by Eskom

- Road upgrades in Waterberg District and the local area
- Upgrading the Marapong wastewater treatment plant
- More than doubling capacity of the Lephalale wastewater treatment plant
- 2.3 billion Rand in local housing construction (by local contractors).

Social Services and Capacity Building

In addition to the Corporate Social Responsibility Program noted above, Eskom has made the following specific investments as part of the Medupi construction program:

- Significant expenditures in local education and training in technical skills; contracting over 1,980 local young people for technical skills development
- Hiring a supplier to provide capacity building for local small and medium enterprises; 2.4 million Rand spent on 28 Lephalale business owners to attend Eskom's Contractor's Training Program in Polokwane
- 3 million Rand to supply medical equipment to clinics in villages in the Lephalale area, and 2.4 million Rand already committed to investing in crèches and primary schools.

³ This information updates the local information provided in the Response and Recommendation of Management.