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**SOUTH AFRICA
ESKOM INVESTMENT SUPPORT PROJECT (EISP)
IMPLEMENTATION UPDATE**

Information Note

*As requested by the Board on May 22, 2012 during the discussion of the Inspection Panel
Investigation Report and Management Report and the Recommendation on the Eskom
Investment Support Project*

Updated as of November 27, 2013

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ESKOM INVESTMENT SUPPORT PROJECT (EISP) IMPLEMENTATION UPDATE
(IBRD LOAN NUMBER 78620-ZA, TF 10690-ZA)**

As requested by the Board on May 22, 2012 during the discussion of the Inspection Panel Investigation Report and Management Report and the Recommendation discussion on the Eskom Investment Support Project

1. The World Bank supports the Republic of South Africa's energy sector through two projects: the Eskom Investment Support Project (EISP) and the Eskom Renewables Support Project (ERSP). The World Bank's Board of Executive Directors approved the \$3.75 billion IBRD loan for the EISP and the \$250 million Clean Technology Fund (CTF) for the ERSP on April 8, 2010 and October 27, 2011 respectively.
2. **Overall Implementation Progress.** As of early October 2013, EISP had disbursed 36 percent (US\$1.343 billion) of the commitment amount—the PAD projected around 70 percent disbursement rate by the end of FY13. The bulk of this has been for financing of the Medupi power plant where steady progress is being made, though slower than envisaged. Steady progress has also been made towards the renewable energy component of the EISP and ERSP – all contracts for the Sere wind farm have been awarded and construction has begun. Procurement for the more complex Upington Concentrated Solar Plant is about to start.
3. **Medupi Power Plant Implementation.** Construction of the Medupi power plant (in the Limpopo Province), which began in May 2007, is advancing. The completion of the first generating unit was initially scheduled for 2012. On November 12, 2013 Eskom confirmed, in writing from senior management, that the expected commissioning of the first generating unit was expected in the latter half of 2014. Subsequent to the CPS Board discussion on November 12, 2013, Eskom is now projecting that the commissioning date will slip by another 4-5 months and is now anticipated for early 2015. The commissioning of the last unit is expected in 2017 (about two and a half years behind schedule). A combination of start-up delays, design changes, contractor coordination issues, poor contractor performance, and labor disputes have been the main causes for the delays. Most recently, a pay dispute led to a strike in January - February 2013 among construction workers of two large contractors (Hitachi and Alstom), forcing a suspension of construction works for almost two months. This labor dispute has been resolved and normal operations have been restored. However, there were more strikes in July and August. In addition, reports of recent construction quality issues with the boilers and commissioning difficulties with the control systems will put additional pressure on the schedule. Eskom is taking measures to rectify the situation and ensure timely completion.
4. **Majuba Rail Implementation.** The implementation of EISP's Majuba rail component, which will help lower Eskom's carbon intensity by shifting coal transport from road to rail, is getting back *on track* with construction groundbreaking having taken place in early April 2013. Although

implementation is more than six months behind schedule, Eskom and the Bank Team are working to claw back some of these delays with streamlining the rest of the tendering processes.

5. Implementation of the Renewable Energy Elements of EISP and ERSP. With regards to ERSP, after a slow start and initial procurement delays, construction of the Sere wind farm (in the Western Cape Province) has begun. Commercial operation of this 100 MW plant is expected in early 2015 when it will start feeding the national grid with renewable energy. In addition to the Sere wind farm, ERSP also provides resources to the Concentrating Solar Plant (CSP) to be located in Upington (in the Northern Cape Province). This is a unique project, as it uses a very innovative technology (thousands of mirrors which concentrate solar rays into a molten salt central receiver and molten salt storage plant) to provide a new approach for the electricity supply in South Africa. The energy output of this plant (approximately 100 MW) will be integrated into South Africa's transmission grid and will be able to provide electricity at any time of the day. Because of these unique characteristics, the selection of a suitable contractor has to be carefully designed and an appropriate procurement strategy developed given the limited market of suppliers. Eskom, in close consultation with the World Bank and the co-financiers, has designed a process that should ensure the greatest possible competition. Financial closure is expected in 2014 following the European Investment Bank's (EIB) presentation of its co-financing for the project to its Board for approval at the end of 2013.

6. Progress with Eskom's Demand Management Program. Eskom continues to achieve gains on demand-side-management with a focus on the mining and residential sectors. The savings realized since the inception of the program have exceeded the target. Between July 2012 and December 2012, independently verified peak demand savings were 220 MW. However, revenue shortfall is adversely affecting the company's FY2013 financial performance. The regulator's decision in February 2013 to grant only half of Eskom's tariff application may require Eskom to review and re-prioritize its large investment programs and seek further efficiency savings.

7. Procurement and Contracting under the Projects. Overall, progress under the EISP and ERSP has been slower than expected due, in part, to Eskom's inexperience with multilateral development financing institutions such as the Bank, which bring specific procurement guidelines. In addition, external challenges related to limited market response to a number of Eskom's tender invitations has resulted in some delays. Further, slower-than-expected approval by the Government of required permits and licenses for some components has affected implementation, including delay in granting exemption for the project from South Africa's national procurement procedures to facilitate use of the Bank's procurement guidelines.

8. Environmental and Social Safeguard Management. Environmental and social safeguard issues are being effectively addressed on this project by the responsible South African authorities through the country's legal and regulatory system. These issues were the main subject of an Inspection Panel review of EISP which was discussed at the Board on May 22, 2012. Management and the Board had agreed, during preparation and at the Board approval of the EISP in 2010, to use South Africa's legal and regulatory framework for assessing and managing environmental and social impacts of the EISP in lieu of World Bank Safeguard Policies, as provided by OP 4.00 (Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in

Bank-Supported Projects). The Bank's project team has been closely supervising the environmental and social aspects of the EISP. The Bank's project team includes senior environmental and social experts who review the implementation of the project's environmental and social aspects every six months.

9. **Flue Gas Desulfurization (FGD).** Eskom has confirmed to Bank management its continued commitment to the installation of Flue Gas Desulphurization (FGD) at the first major maintenance shutdown of each unit as per the Loan Agreement. At the time of Board approval, it was expected that FGD installation would be completed by 2021. Because of the delays in the overall construction schedule of Medupi as a result of labor unrest and technical issues, the FGD has also been delayed. The November 12, 2013 letter from Eskom management indicated an expected date of final FGD installation in 2023, though any further construction delays risk revisions to this timeline. In its October 28, 2013, draft application seeking exemption and postponement of Minimum Emission Standards (MES) for the Medupi power plant, Eskom requested until 2027 to complete the FGD installation in order to avoid the need to return to the environmental authorities in the case of any further construction delays. The Bank clearly communicated to Eskom senior management that it sees no reason, given the construction schedule as of November 12, 2013, that the 2023 installation date would not be met. We have also received written confirmation from Eskom Senior Management that they remain committed to this schedule. The Bank team will continue to monitor progress on Eskom's request and the installation of the FGD equipment.

10. **Water Availability.** Although Medupi's generating units have been designed to consume a minimum amount of water, the operation of FGD equipment is water intensive. The necessary water supply will be facilitated through the two phases of Mokolo-Crocodile River Water Augmentation Project (MCWAP Phase I and Phase 2) carried out by the Government's Department of Water Affairs (DWA). Construction of the first phase of MCWAP is underway to supply by June 2014 approximately 10.9 million m³/yr to Medupi, compared to a water requirement of 15.4 million m³/yr, when operating with full FGD equipment. The need for additional supply of water for operating full FGD at Medupi will be met through the MCWAP Phase 2. As per the legal agreement, the FGD equipment will be retrofitted six years after Commercial Operation Date of each unit, which will necessitate water supply from the second phase of MCWAP by end of 2020. Eskom and the DWA are working closely together to ensure that both Phases of MCWAP are implemented in a timely manner. The Bank Team will continue to monitor progress on water supply.

11. **Enhanced Implementation Support.** Given the size and risks of the two Eskom operations, the Bank has been enhancing its own implementation support and deploying additional resources. Similarly, Eskom and the Government of South Africa have intensified project supervision and coordination. The Bank has intensified implementation support by providing continuous support in the field through placing a TTL (international GH staff) in Pretoria and hiring a Senior Procurement consultant to accelerate procurement flow. Senior management is also closely monitoring project implementation.

12. **Potential Level 2 Restructuring.** Given the start-up delays, Management is considering a Level 2 restructuring to increase the project's development effectiveness and likelihood of success.

Such restructuring would likely include closing date extension, reallocation of some proceeds, and updating of results indicators to better reflect the current situation.

13. Management agrees to provide an additional information update to the Board one year from now on the status of both MCWAP and the Medupi plant, including installation of the FGD units.