REPORT NO.: RES39035

RESTRUCTURING PAPER

ON A

PROPOSED PROJECT RESTRUCTURING

OF

ESKOM INVESTMENT SUPPORT PROJECT

APPROVED ON APRIL 8, 2010

TO

ESKOM HOLDINGS SOC LIMITED

GUARANTEED BY THE REPUBLIC OF SOUTH AFRICA

ENERGY AND EXTRACTIVES GİOBAL PRACTICE

AFRICA REGION

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Marie Francoise Marie-Nelly
Regional Director:	Riccardo Puliti
Practice Manager:	Wendy E. Hughes
Task Team Leaders:	Franz Gerner, Frederic Verdol

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
BSP	Battery Storage Program
CO_2	Carbon Dioxide
CSP	Concentrated Solar Power
CTF	Clean Technology Fund
DMRE	Department of Mineral Resources and Energy
DPE	Department of Public Enterprises
EAF	Energy Availability Factor
EISP	Eskom Investment Support Project
ERSP	Eskom Renewables Support Project
FGD	Flue Gas Desulphurization
FY	Fiscal Year
GDP	Gross Domestic Product
GoRSA	Government of the Republic of South Africa
IBRD	International Bank for Reconstruction
IP	Implementation Progress
IRP	Integrated Resource Plan
JET	Just Energy Transition
mg/Nm^3	milli-gram per Normal cubic meter
MS	Moderately Satisfactory
MU	Moderately Unsatisfactory
MW	Megawatt
NDC	Nationally Determined Contributions
NERSA	National Energy Regulator of South Africa
NT	National Treasury
OP	Operational Policy
PDO	Project Development Objective
PFMA	Public Financial Management Act
PV	Photovoltaic
R	South African Rand
RE	Renewable Energy
REIPP	Renewable Energy Independent Power Producer
RSA	Republic of South Africa
RVP	Regional Vice-Presidency
SO_2	Sulphur Dioxide
SOE	State-owned Enterprise
TA	Technical Assistance

UCLF	Unplanned Capability Loss Factor
WML	Waste Management License
WUL	Water Use License

BASIC DATA

Product Information

Project ID	Financing Instrument
P116410	Investment Project Financing
Original EA Category	**Current EA Category**
Full Assessment (A)	Full Assessment (A)
Approval Date	**Current Closing Date**
08-Apr-2010	31-Dec-2020

Organizations

Borrower	Responsible Agency
ESKOM Holdings SOC Limited	ESKOM

Project Development Objective (PDO)

Original PDO

The project development objective (PDO) of the Eskom Investment Support Project for South Africa is to enhance its power supply andenergy security in an efficient and sustainable manner so as to support both economic growth objectives and South Africa's longterm carbon mitigation strategy.

Summary Status of Financing

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net Commitment	Disbursed	Undisbursed
IBRD-78620	08-Apr-2010	16-Apr-2010	31-May-2010	31-Dec-2020	3750.00	3082.98	667.02

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No

I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

A. Energy Sector Background

1. The South African electricity sector is dominated by the vertically integrated power utility, Eskom, the largest producer of electricity in Africa, and the largest state-owned enterprise (SOE) in the country with assets representing about 16 percent of Gross Domestic Product (GDP) and 48,000 staff. Eskom is responsible for over 90 percent of power generation, all of transmission, and about 60 percent of electricity supplied to consumers. The rest of the electricity supply is carried out by about 180 municipalities. The private sector has thrived in wind and solar photovoltaic (PV) generation, through the Renewable Energy Independent Power Producers (REIPP) program, representing 5 percent of the country's generation capacity.

2. The South Africa power sector is currently undergoing one of its worst energy crises with frequent and chronic load shedding and damaging macro-fiscal consequences. Eskom is facing deep financial and operational challenges culminating from a combination of weak governance, stagnant electricity demand, and inefficient cost and revenue structures. The main fiscal risk arises from the needed budget transfers to keep Eskom liquid and the contingent liabilities in the form of government guarantees. Key sectorial challenges are:

    a. Lack of corporate governance: Since 2015, SOEs in the Republic of South Africa (RSA), and especially Eskom, have faced severe issues related to governance. Post 2018, the Government has appointed a new Eskom Board along with permanent Group Chief Executive, Chief Financial Officer, and a Chief Operations Officer, aiming to root out financial mismanagement and to restore transparent and effective governance, and thereby build confidence in Eskom. Eskom has made progress in this domain; however, maintaining good corporate governance, especially at the leadership and management levels, remains one of the top risks related to the sustainability of Eskom.

    b. Unsustainable Eskom debt risking the Sovereign: Eskom has an unsustainable debt burden of South African Rand (R) 450 billion – about US$32 billion - (representing 17 percent of total RSA debt and 55 percent of contingent liability from Government of Republic of South Africa (GoRSA) Guarantees), of which R80 billion is maturing in next three years. Cash generated from Eskom operations is insufficient to service debt obligations, and thus Eskom needs explicit Government support to remain a going concern – becoming a risk to the sovereign as continued support to Eskom can increase fiscal deficit and debt-to-GDP ratio. Such risks can culminate into a Sovereign rating downgrade. Conversely, lack of support from sovereign can lead to Eskom defaulting on its debt obligations causing serious economic upheaval, impacting sovereign.

    c. Insufficient electricity tariffs. There is a significant gap between Eskom's current average price of electricity (6.2 US$cents/kWh) and National Energy Regulator of South Africa's (NERSA) price band of cost-reflectivity (between 8.5 US$cents /kWh and 10 US$cents /kWh). Eskom requested a tariff increase of 15 percent for FY20 and 12 percent per annum thereafter. NERSA granted increases of 4.4 percent, 8.1 percent and 5.2 percent for FY20, FY21, FY22. Eskom argues that the current tariff is not sufficient to fully recover incurred costs and a court case is currently ongoing between NERSA and Eskom.

    d. Eskom is in an unsustainable situation of declining sales, increasing costs, and mounting debt with poor collection rates**:** In July 2019, Eskom recorded a R21 billion net loss with significant liquidity issues. Cash generated from operations (R33 billion) is insufficient to service debt obligations (R69 billion). Eskom's financial losses have grown ten-fold as power demand continues to decline (1.8 percent decline per year for

next five years), combined with increasing costs (coal procurement costs, diesel import costs for use during load-shedding periods and employee costs). Operational expenditures increased 30 percent in five years reaching R151 billion in FY19. On revenues, Eskom has a current overdue of growing arrears at R43 billion (59 percent municipalities, 37 percent Soweto, 4 percent others).

e. The power sector faces an outdated Business Model: The vertical integration of Eskom across the entire electricity chain has resulted in a lack of transparency and accountability. The generation sector faces inefficiencies due to lack of competition and an under-maintained aging coal fleet. The transmission and distribution sectors face aging infrastructure. The supply business face economic and technical problems due to highly fragmented retail markets, aging infrastructure, underfinanced municipalities, and regulatory and governance uncertainty. Department of Public Enterprises (DPE) has launched the Eskom Paper detailing the plan to restructure Eskom functionally and legally into three state-owned entities for generation, transmission and distribution. The unbundling will be finalized by June 2021, but further reform efforts will be required to ensure the long-term sustainability of the sector, including dealing with fragmentation of distribution, solving cost, revenue (i.e. tariff) issues and implementing a competitive generation market.

f. RSA needs to prepare better for implementing a Just Energy Transition (JET): One of the biggest challenges for the energy sector, and for the policymakers shaping it, is to find the right formula to ensure a JET, combing often conflicting objectives of providing reliable power (security of supply), affordable power (i.e. to stimulate economy development); and sustainable power (to meet climate change targets and Nationally Determined Contributions (NDC) commitments) while mitigating socio-economic impacts. There is currently a lack of strategic and coherent policies on how to achieve the JET in RSA.

g. Inability to provide Security of Supply and frequent Load Shedding: Post 2015 supply crisis, Eskom started load shedding again in February 2019 and for the first time in December 2019 Stage 6 load shedding was implemented (i.e. shedding 6000 MW (20 percent of peak load) and six-eight hours/day per customer on average). The main reason is inadequate maintenance over the years of the aging generation fleet (50 percent of plants over 35 years or older) leading to frequent plant breakdowns, and existing major defects in the new plants Medupi and Kusile that are running below their full capacity. It is anticipated that the risk of load shedding will continue for about two years, while Eskom implements the 9-point Generation Improvement Plan, approved in September 2019, that aims to improve the operational performance of old and new generation fleet. Within this program is expected that both Medupi and Kusile power complexes increase their Energy Availability Factor (EAF) from below 70 percent in 2019 to up to 85 percent in 2021.

3. It is important to acknowledge that the GoRSA has been serious about tackling the energy crisis (and fixing Medupi, Kusile and the sector) by issuing several creditable policy actions over the last 12 months; including:

- Eskom 9-point Generation Improvement Plan (September 2019) - improve performance of old and new generation fleet
- Eskom Turnaround Plan (September 2019) – internal operational recovery and cost reform plan
- Integrated Resource Plan - IRP (October 2019) - electricity sector masterplan (demand and supply) till 2030
- Eskom Transmission Development Plan - TDP (November 2019) - update of electricity power transmission and distribution investment needs by 2030
- GoSA Eskom Special Paper (November 2019) - endorsed by Cabinet, to lay out the Eskom unbundling plan

B. Project Status

4. The project (EISP) was approved on April 8, 2010 in the total amount of US$13,861.82 million, of which US$3,750 million is International Bank for Reconstruction and Development (IBRD) loan and the remaining is co-financed by

Eskom, African Development Bank (AfDB), European Credit Agencies, China Development Bank and other financiers. The project became effective on May 31, 2010.

5. The project was restructured for the first time on July 7, 2015 to extend the closing date from October 30, 2015 to December 31, 2019, mainly due to delays in construction of the Medupi power plant. The project was restructured for a second time on November 30, 2018, to (i) replace the Kiwano Concentrated Solar Power (CSP) Plant pilot project under Component B (Renewable Energy (RE) component), with a grid-scale BSP; and to (ii) extend the project´s closing date by twelve months, from December 31, 2019 to December 31, 2020 to allow for the full implementation of the BSP. At the time, it was expected that all other activities under the project would have been finished by December 2019, so this restructuring was processed with the limitation that only Sub-component B2 – the battery storage sub-component - remains eligible for disbursement after December 31, 2019. The Eskom Battery Storage Program (BSP) is co-financed by the Clean Technology Fund (CTF), under concessional loans managed by the World Bank (Eskom Renewables Support Project ((ERSP), P122329), with closing date of December 30, 2021) and the AfDB. The program implementation design is in two phases, with EISP (IBRD) financing the first phase.

6. The Project Development Objective (PDO) is to enable Eskom Holdings to enhance its power supply and energy security in an efficient and sustainable manner so as to support both economic growth objectives and the long-term carbon mitigation strategy of RSA. To achieve the PDO, the project supports the financing of the following three components: Component A: the Medupi Power Plant (4,800 MW), using supercritical (clean-coal) technology and associated transmission lines (US$2.4 billion equivalent); Component B: Investments in Renewable Energy (100 MW Sere Wind Power Plant and Battery Storage Program) (US$267.8 million equivalent); Component C: Support for low Carbon Energy Efficiency Investments (Majuba Rail) and Technical Assistance (TA) (US$415.8 million equivalent).

7. Several delays have occurred since the last extension was granted last year, mainly caused by contractual issues with some of the contractors in charge of the works related with the finalization of Medupi's associated Transmission lines and the Majuba Rail project. In addition, the delay in obtaining Government's approval for the Public Financial Management Act (PFMA), required to tender the first phase of the BSP, have forced the Borrower to request yet another extension of the project to be able to fulfil the PDO, and move the project out of a Moderately Unsatisfactory (MU) rating for Implementation Progress (IP), before project's closing. This proposed extension would also entail extending the disbursement eligibility of all components until June 30, 2021 (except for Medupi power plant sub-component that will close on December 31, 2019).

8. As of the most recent Implementations Status and Results Reports, project performance is rated Moderately Satisfactory (MS) for progress towards achievement of PDO, since although delayed, good progress has been made towards achieving PDOs indicators. However, IP is rated Moderately Unsatisfactory (MU)[1] due to slower than anticipated progress in dealing with outstanding issues in Medupi Plant (boiler's latent defects, delay in commencing the Flue Gas Desulphurization (FGD) program, which is a legal covenant for the loan, and spikes on Sulphur Dioxide emissions), delays in renewable component and transmission lines, and lack of progress on Majuba Rail (which also includes two outstanding resettlement cases). To address these issues, Eskom agreed on priority actions during last joint World Bank – AfDB supervision mission in July 2019. A technical supervision mission on December 2–6, 2019 confirmed that substantial progress on key actions have been made since the July 2019 mission, including Eskom presenting a credible plan to address latent defects at the Medupi power plant over the next two years. It was agreed that the IP could be upgraded to MS following the extension of the closing date if implementation progress continues

[1] The PDO and IP ratings had been in the unsatisfactory ranges since October 2013. The PDO rating was upgraded in April 2019, due to the good progress made towards achieving the PDO indicators: 3200 MW out of the 4800 MW capacity of Medupi were connected then to the network (now 4000 MW have been handed over for Commercial Operation), and 100 MW or 100 percent of Sere Wind had been operational since March 2015, with the associated Carbon Dioxide emissions avoided.

as set out by Eskom. Cumulative disbursements as of December 2019 stand at US$3.08 billion (82 percent of the total loan of US$3.75 billion).

Table 1: Disbursement Status per Component

Component	Sub-component	Implementation Progress	Disbursements (US$ million)
A	A1. Medupi Power Plant	99 percent	1,857 out of 1,897 (98 percent)
	A2. Transmission Lines	90 percent	353 out of 484 (73 percent)
B	B1. Sere Wind Plant	Completed	22.83 out of 22.83 (100 percent)
	B2. CSP/BSP	Procurement still to commence	0 out of 245 (0 percent)
C	C1. Majuba Rail	97.5 percent	216 out of 396 (55 percent)
	C2. TA for Energy Efficiency and Cross border Renewables	Not started	0 out of 20 (0 percent)

9. The following summarizes progress of each of the project components:

a) **Component A: Medupi Power Plant and Transmission Lines (US$2.3814 billion)**

(i) A.1 Medupi Power Plant (US$1.897 billion): all six units (800MW each) are now synchronized to the grid, and only Unit 1 remains to reach commercial operation (CO), expected by May 2020. Despite this progress, plant performance is low as measured against the key parameters of Energy Availability Factor (EAF) and Unplanned Capability Loss Factor (UCLF), mainly due to the major plant defects, an inadequate maintenance and operating regime, and spare part management difficulties. All six units are at or below the already low target of 75 percent set by Eskom for EAF[2] (vs a standard performance of 92 percent after two years of operation)[3]. For UCLF, only Unit 3 reaches the target of 18 percent set by Eskom (vs a standard performance of 2 percent). To address these issues, Eskom has established a Generation 9-Point Plan of action for all plants.[4] In addition, an Agreement has been signed between Eskom and the boiler contractor, agreeing on technical solutions to address the major defects, with a clear execution schedule. Testing and implementing these integrated solutions will start in January 2020 in Unit 3 (this will allow to set a new boiler performance reference), and then will be sequentially rolled out in the remaining units over a 18-month period that is expected to conclude in June 2021. By then, Eskom expects that the EAF improves up to 85 percent.

Almost all funds are disbursed, and this sub-component's disbursement category will close in December 31, 2019,[5] as agreed during the previous restructuring in December 2018.

(ii) A.2 Transmission Lines (US$484 million): while over 90 percent of the works are completed, issues with contractors have caused three transmission line sections to be delayed, and outstanding works to be rebid, making it unfeasible to complete all the remaining 100km before this sub-component's current disbursement deadline (December 31, 2019). A request to keep the related disbursement category open until December 2020 was received from Eskom during the July 2019 mission.

[2] Current targets set by Eskom of 75 percent for EAF and 18 percent for UCLF are the best practically achievable considering all issues: major defects, operation and maintenance regime, and spare parts management difficulties.
[3] EAF target of 92 percent and UCLF target of 2 percent after one year of Commercial Operation were targets required in Eskom's original design as well as typical world standards.
[4] Progress is tracked at Chief Executive Officer (CEO), Chief Operations Officer (COO) and Executive Committee (EXCO) level.
[5] Disbursements will be able to continue during the standard four-month grace period until April 30, 2020, for works finalized before December 31, 2019.

b) **Component B: Renewable Energy Investments (US$268 million):**

(i) B.1 Sere Wind Plant (US$23 million): the plant is fully operational since March 2015, with plant performance exceeding target output and Eskom gaining valuable experience on wind technology and operating wind generation plant (Sere Wind is Eskom's only wind plant).

(ii) B.2 Battery Storage Program (BSP) (US$245 million): since the BSP replaced the Kiwano CSP plant in December 2018, technical, social and environmental assessments for selected battery sites have been conducted. Eskom substantially advanced the pre-engagement to market, including the realization of a webinar in September 2019 to ensure that prospects interested in Eskom BSP fully understand the project and provide guidance on market response, implementation, operation and maintenance feasibility. However, program implementation and tendering has been delayed due to delay in Government approvals needed to satisfy the PFMA requirements. The request for PFMA approval was submitted by Eskom to the government in April 2019 and was approved by Minister of Finance on August 7, 2019, and on November 21, 2019 by the DPE (Eskom's line ministry) for Phase I of the program which amounts to R7.2 billion (≈ US$485 million).[6] Phase I will be financed with the IBRD loan (US$245 million) and Eskom is considering financing the remaining works of this phase with the CTF loan (ERSP P122329). This delay has pushed the program's implementation timeline beyond the current project's closing date of December 31, 2020. The tender is now planned to be launched in first quarter 2020 and the Phase I to be completed by June 2021.

c) **Component C: Low Carbon Energy Efficiency Investment and TA (US$416 million):**

(i) C1. Majuba Rail (US$396 million): although over 97 percent of the works are complete, some activities have been delayed (works on the Majuba Rail Yard, the connection between the Yard and the new rail line and commissioning the new coal train services) due to several contractual issues and a lengthy procurement approval process between Eskom and the National Treasury (NT). This will prevent commissioning of the rail by December 31, 2019 as originally planned. Completion of the works is now planned by June 2020, and commissioning of the train operations by December 2020, beyond the current disbursement category's closing date for this component, which is December 31, 2019.

(ii) C2 and C3. Technical Assistance (US$20 million): no activities have been implemented under this sub-component. Several potential activities have been discussed over the years, but the funds were never committed. Eskom has now requested to use these TA funds to support the restructuring and unbundling of Eskom, a lengthy process that will go beyond the project's current closing date of December 31, 2020. The Eskom paper states that the unbundling process should be finalized by June 2021.

10. **Social and Environmental Safeguards.** The project uses OP 4.00 Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in World Bank-supported projects. The last mission (December 2019) confirmed that the project continues to comply with the regulatory requirements and conditions of authorization by the relevant GoRSA's authorities for the assessment and management of environmental and social risks and impacts, including requirements for preparing impact assessments, public notification, disclosure and receipt of all necessary environmental and social permits, licenses and authorizations for the activities supported under the project. OP 4.00

[6] BSP will be implemented in two phases. Phase I includes the installation of 800MWh distributed battery storage in eight sites. Phase II will install 640MWh of distributed battery storage with 60MW of distributed solar PV at various sites still being defined.

will continue to apply to new activities to be supported through the cost savings under this restructuring and no new safeguards policies will be triggered under the transmission lines sub-component. Key issues are:

a) Air emissions: Ambient air quality, as reported by Eskom, meets ambient standards for all criteria pollutants under the Air Quality Act (AQA), including ozone, nitrous oxides (NOx), SO2, particulate matter (PM10), and lead (Pb). Eskom is reported to comply with AQA point source Minimum Emissions Standards (MES) for PM and NOx. Point source emissions also meet the MES for SO2 provided in Air Emissions License (AEL)[7]. Monthly averaging has allowed Eskom to meet MES where continuous monitoring demonstrated frequent spiking within 24-hour periods. Spiking of daily average SO2 emissions were reported by Eskom to have declined significantly over the most recent six-month reporting period for units 3, 4, 5 and 6, with total daily average SO2 exceedances declining from 23 in April to 5 in October.

b) FGD schedule: Implementation of the FGD program, which is a legal covenant for the Loan, keeps being delayed. The completion schedule for the FGD has been revised several times by Eskom. During July 2019 supervision mission, Eskom presented a schedule to complete the installation of the FGD in all six units by January 2030 (the committed date as per the covenant was June 2025). An optimized schedule was presented during the mission in December 2019 with a best-case scenario for installation completion in all units by 2027 and a base case scenario by 2032. Because installation and commissioning of the FGD extends beyond the project closing date, as proposed to be extended, the Bank will continue environmental and social monitoring of the Medupi plant in a reasonable manner until the legal covenant is met.

c) Water use: The FGD process is expected to use significant quantities of water. Eskom's existing Water Use License (WUL) allows Medupi to abstract up to 10.9 million cubic meters of water per year from the Mokolo Dam, which is located approximately 60 km southeast of the power station. At full FGD installation, an additional demand of 4.5 million cubic meters of water per year is projected to be needed. To fulfill this demand, Eskom submitted an application to amend the WUL to abstract up to 15.4 million cubic meters of water per year from both the Mokolo Dam and Crocodile River (West) through a proposed scheme by the Department of Water Affairs. The scheme includes increasing pipeline capacity from the Mokolo Dam (Phase 1) from 13.5 million cubic meters of water per year to 50.4 million cubic meters of water per year and constructing pipelines (Phase 2) to transfer a total of 191 cubic meters of water per year from the Crocodile River (West) to the Lephalale area, including an approximately 130 km pipeline (Phase 2A) to transfer up to 110 million cubic meters of water per year. The DEA provided an authorization for Phase 2A in March 2019, however this authorization was appealed by an environmental group which is still pending with the DEA. Eskom's FGD WUL application is also still pending with DEA, as it is linked to the FGD Waste Management License (WML) application which has been withdrawn because DEA objected to Eskom's plan to mix coal ash with gypsum, the latter produced as a residue of the FGD process. Timelines for receipt of both the FGD WML and WUL are a critical path for FGD installation and Eskom reports that the process could take up to two-years.

[7] In 2014, Eskom received from the Department of Environmental Affairs (DEA), a five-year postponement to meet the 'new plant' sulphur dioxide (SO2) Minimum Emissions Standards (MES) of 500 mg/Nm3 averaged daily from 2020 to 2025, which could be achieved through the implementation of the FGD program. In 2017, Eskom requested DEA to apply an 'alternative' MES of 4,500 mg/Nm SO2 averaged monthly and received approval from DEA to meet 3,500 mg/Nm3 SO2 averaged monthly, instead of daily as is the typical 'existing plant' standard in the Air Quality Act (AQA). In November 2019, Eskom submitted a request to DEA for another five-year postponement to meet the 'new plant' MES in AQA of 500 mg/Nm3 SO2 from 2025 until 2030. The Eskom application also requests to apply 'alternative' 'existing' and 'new plant' MES for the period of 2025 – 2030. The requested 'alternative 'existing plant' MES is 4,000 mg/Nm3 SO2 averaged monthly and the requested 'alternative' 'new plant' MES is 1,000 mg/Nm3 SO2 averaged monthly. Both requested alternative standards are above the MES in the current AEL and the respective standards provided in the AQA. As part of the application to DEA, Eskom committed to complete the FGD as the primary technology that will allow them to meet MES under the AQA. Eskom plans to supplement its application for applying alternative standards with ambient air quality modeling by March 2020.

As part of the FGD optimization schedule, Eskom proposes to issue the Request for Proposals (RfP) for FGD contracts prior to receipt of both the WUL and WML.

d) Open resettlement cases in Majuba Rail: two on-farm resettlements are pending. These two tenant farmers resulted into a letter of complaint sent to the World Bank on July 3, 2019 from an attorney representing the affected families regarding the delayed resettlement issues on the Majuba Rail Project. The complaint is being handled through the World Bank grievance redress service (GRS) and Eskom is actively working toward a solution. Unless a solution is found shortly, Eskom, which has already compensated the two land owners/farmers for the relocation of both families, aims to approach the Land Claims Court early 2020 to compel them to relocate the families even on a temporary basis, so the project can be commissioned. Since 2008, Eskom has so far resettled 41 Project affected households out of the 43 households affected by the project.

11. These issues have kept the overall safeguards rating being moderately satisfactory.

12. **Audits and governance.** The Entity is in compliance with the financial management (FM) financing covenants relating to the submission of the Interim Financial Reports and audits. There are no financial audit reports overdue and the World Bank has received the latest report as of July 26, 2019. However, the entity has received Qualified audit opinions since 2016/17, 2017/18 and 2018/19 financial years. The basis for qualification related to the inability to determine with certainty the full extent of a possible understatement of reporting on irregular, and fruitless and wasteful expenditure. In the 2017 and 2018 financial years, the Funders, including the World Bank requested the Eskom's auditors to provide independent assurance that the Funders were not affected by the audit qualification. The report assuring that the funders, including the World Bank were not affected was provided. A similar request will be made for FY19 as well.

13. In the 2019 financial year, the qualification related to expenditures stemming from already identified irregular contracts in the previous two financial years, that are yet to be condoned by the relevant authorities including NT. These expenditures are likely to increase or remain in the balance sheet until such time the contracts are condoned. It was reported to financiers that new incidences of irregular expenditures stemming from new contracts has significantly reduced, signaling an improvement in related internal controls. This assertion will later be reviewed by the independent auditors. To this end, a meeting was convened at Eskom on December 6, 2019 with the World Bank's FM team, to conduct an updated assessment of the situation and agree on an action plan to address the issues identified. It was agreed that a verification exercise by Eskom and the World Bank will be concluded by January 2020

14. **Compliance with legal covenants.** Owing to Eskom's poor financial position the company has not met the targets under Loan Agreement, Schedule 2, Section B4 requiring the Borrower to achieve a Debt Service Coverage Ratio equal or greater than 1.3 (for FY ended in March 2019 it was 0.5 down from 0.9 the previous year), and an EBITDA Margin of above 25 percent (16 percent down from 26 percent previous year). Eskom has submitted the required Financial Plan explaining how it plans to achieve the target and, therefore, providing a positive signal towards compliance to the covenant. The financial plan submitted by the Borrower and acceptable to the World Bank partially provides compliance with covenant C (interim unaudited financial forecast where not provided, which is the second condition of covenant C). The covenant regarding adequate water supply for Medupi plant to operate is partially complied with, as the water augmentation scheme is still under implementation; it is expected that the covenant will be complied with before the project restructuring's proposed closing date. Other covenants on FGD and SO2 emissions are not yet complied with.

C. Rationale for Restructuring

15. The proposed six-months closing date extension, from the current closing date of December 31, 2020 to June 30, 2021 (and the request to keep all disbursement categories open, except the one for A1: Medupi Power Plant, until June 30,

2021) will allow Eskom to complete remaining works related to the transmission lines, implement Phase 1 of the BSP, commission the Majuba Rail, and support the Restructuring RoadMap for Eskom; and therefore achieve the PDO by the new closing date.

16. In particular, the extension would allow Eskom to:

    - Fully evacuate the power generated in Medupi into the grid, thus contributing to reduce system load shedding and ensuring the stability of the power grid.
    - Demonstrate the enabling impact of battery storage technology for wind and solar energy integration in the RSA power grid, critically supporting RSA's long-term carbon mitigation strategy.
    - Increase the efficiency of Majuba power station, reduce GHG-emission, and significantly reduce transport costs with the transfer of coal transport from road to rail.

17. The proposed restructuring would also allow reallocation of uncommitted funds of up to US$ 270 million (from costs savings achieved under component C.1 Majuba Rail and currency exchange rate) to: (i) fund eligible contracts to supply transmission and distribution equipment; (ii) fund outstanding contracts under Majuba rail sub-component; and (iii) enhance the support to be provided to Eskom under the TA sub-component.

18. Even though component A.1 Medupi power plant will close in December 31, 2019, the proposed extension will allow continued supervision of progress in addressing the boiler's latent defects. The schedule to implement the agreed technical solutions is aligned with the proposed closing date of June 2021, so it is expected that the EAF of the plant will improve substantially to about the 85 percent target by the new closing date.

19. Furthermore, due to Eskom's precarious financial situation, the company does not have access to other sources of finance to complete the works. Hence, without this project extension it may not be possible to complete some key assets leaving consumers vulnerable to increased power interruptions and further deteriorating eletricity services.

II. DESCRIPTION OF PROPOSED CHANGES

20. The proposed restructuring includes: (i) extension of the closing date; (ii) change in component's costs and reallocation between disbursement categories; (iii) change in implementation schedule; (iv) change in results framework; (v) change in disbursement estimates; and (vi) change in procurement to adopt the latest World Bank Procurement Regulations with the perspective to allow the GoSA to use uncommitted funds for eligible expenditures, using GoSA National Procurement Procedures. A project restructuring request was received on November 14, 2019 from Eskom.

Change in component's costs and reallocation between disbursement categories

21. Eskom has requested a reallocation of funds between categories, from savings achieved under the Majuba rail sub-component, , and unallocated funds, to the Transmission Lines (component A.2) and TA subcomponents (component C.2), to enable Eskom to finance additional eligible construction contracts, and enhance the support to be provided regarding the restructuring and unbundling of Eskom, respectively

22. This reallocation of funds will entail the following changes in component's costs:

    - Component A will increase US$35.98 million, from US$2,380.85 million to US$2,416.83 million; and
    - Component C will decrease US$35.77 million, from US$415.77 million to US$380 million.

23. Reallocation between disbursement categories would be as indicated in the table below:

Table 2: Reallocation between Disbursement Categories

Disbursement category	Current Allocation	Proposed allocation

(1) Goods and Works (including supply and installation) for Part A.1(a) (Medupi power plant)	1,896,830,000.00	1,896,830,000.00
(2) Goods, Works (including supply and installation), non-consulting services for Part A.1(b) (Associated Transmission lines)	484,020,000.00	520,000,000.00
(3) Goods, Works, non-consulting services for Part B.1 (BSP)	22,830,360.00	22,830,361.00
(4) Goods, Works, non-consulting services and consultants' services for Part B.2 (BSP)	245,000,000.00	245,000,000.00
(5) Goods, Works, non-consulting services and consultants' services for Part C.1 (Majuba Rail)	395,770,000.00	280,000,000.00
(6) Consultants' services for parts C.2 and C.3 (Majuba and TA)	20,000,000.00	100,000,000.00
(7) IBRD Interest During Construction	400,000,000.00	400,000,000.00
(8) Other Lender Interest During Construction	225,000,000.00	225,000,000.00
(9) Unallocated	51,174,640.00	50,964,639.00
(10) Front-end Fee	9,375,000.00	9,375,000.00
(11) Premia for Interest Rate Caps and Collars	0	0
Total	**3,750,000,000.00**	**3,750,000,000.00**

Change in sub-component description

24. Description of sub-component C3, originally linked to TA activities for the development and implementation of domestic and cross-border renewable energy and energy efficiency projects, will be modified to include the TA support to be provided for Eskom's reform and unbundling.

Change in implementation schedule and closing date

25. It is proposed to extend the project's closing date by six months, from December 31, 2020, until June 30, 2021, to allow completion of remaining works under Sub-components A.2 (Transmission lines), B.2 (BSP) and C.1 (Majuba rail), and to be able to use funds under sub-component C.2 (TA) to support reforming and unbundling Eskom.

26. In addition, it is requested to allow continued disbursement for all disbursement categories, except for category related to sub-component A.1 Medupi Power Plant, until June 30, 2021. During the restructuring approved in December 2018, it was decided that all disbursement categories would close by December 31, 2019, except category B.2 for the BSP that would continue open until December 31, 2020, since at that time it was estimated that the key activities requiring disbursements in these categories would have been completed by the end of 2019. Due to delays and issues described in the earlier sections of this restructuring paper, there is a need to continue disbursements as detailed in the table below. Disbursements on these categories will continue through the end of the project's proposed new closing date, at which time, standard IBRD disbursement deadlines will apply.

27. The proposed closing date extension meets the requirements of the World Bank Investment Project Financing (IPF) Directive regarding extension of closing dates, specifically: (i) the project objectives remains achievable; (ii) the performance of the Borrower remains satisfactory; (iii) the World Bank and the Borrower agree on actions set out and closely followed up in the Aide Memoire that will be undertaken by the Borrower to complete project critical activities; and (iv) there are no outstanding audits and/or interim financial reports.

Table 3: Current and Proposed Closing Dates of the Disbursement Categories

Component / Sub-component		Current closing date of the disbursement category	Current closing date	Proposed closing date of the disbursement category	Proposed Closing date
A	A1) Medupi Power Plant	December 31, 2019	December 31, 2020	December 31, 2019	June 30, 2021

	A2) Transmission Lines	December 31, 2019		June 30, 2021	
B	B1) Sere Wind Plant	December 31, 2019		June 30, 2021	
	B2) CSP/BSP	December 31, 2020		June 30, 2021	
C	C1) Majuba Rail	December 31, 2019		June 30, 2021	
	C2) TA for EE/Renewables	December 31, 2019		June 30, 2021	

Change in Results Framework

28. The Results Framework will be revised to extend the target end date of the project's results indicators in line with the proposed closing date extension.

Change in disbursement estimates

29. The disbursement estimates will be revised to reflect the latest delays and extension to June 2021. The following are the revised estimates: FY2020 (US$178 million); FY2021 (US$373 million); FY2022 (US$116 million).

Change in procurement

30. The project is currently under the World Bank Procurement and Consultant Selection Guidelines from 2010. The change in procurement to adopt the World Bank Procurement Guidelines from 2016[8] would allow the Borrower to use uncommitted funds for eligible expenditures using the Borrower's National Procurement Procedures for packages of up to US$20 million, that will have to be reviewed and found acceptable to the World Bank in early 2020. This would avoid cancellation of funds under the IBRD loan, funds that are much needed in the current Eskom's financial situation.

31. The packages to be financed will be eligible works under the Transmission Lines sub-component, and outstanding activities under the Majuba Rail sub-component.

[8] Procurement Regulations for IPF Borrowers (dated July 2016), revised November 2017 and August 2018.

III. SUMMARY OF CHANGES

	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Reallocation between Disbursement Categories	✓	
Disbursement Estimates	✓	
Procurement	✓	
Implementation Schedule	✓	
Implementing Agency		✓
DDO Status		✓
Project's Development Objectives		✓
Cancellations Proposed		✓
Disbursements Arrangements		✓
Overall Risk Rating		✓
Safeguard Policies Triggered		✓
EA category		✓
Legal Covenants		✓
Institutional Arrangements		✓
Financial Management		✓
APA Reliance		✓
Other Change(s)		✓
Economic and Financial Analysis		✓
Technical Analysis		✓
Social Analysis		✓
Environmental Analysis		✓

IV. DETAILED CHANGE(S)

COMPONENTS

Current Component Name	Current Cost (US$M)	Action	Proposed Component Name	Proposed Cost (US$M)
Medupi Power Plant	2380.85	Revised	Medupi Power Plant	2416.83
Renewable energy (Sere Wind Farm and Battery Storage Program)	267.83	No Change	Renewable energy (Sere Wind Farm and Battery Storage Program)	267.83
Support for low carbon energy efficiency comps., comprising the Majuba Railway for coal transportation & TA prog. for energy efficie ncy	415.77	Revised	Support for low carbon energy efficiency comps., comprising the Majuba Railway for coal transportation & TA prog. for energy efficie ncy	380.00
TOTAL	**3,064.45**			**3,064.66**

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Revised Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
IBRD-78620	Effective	31-Oct-2015	31-Dec-2019, 31-Dec-2020	30-Jun-2021	30-Oct-2021

REALLOCATION BETWEEN DISBURSEMENT CATEGORIES

Current Allocation	Actuals + Committed	Proposed Allocation	Financing % (Type Total)	
			Current	Proposed
IBRD-78620-001 | Currency: USD				
iLap Category Sequence No: 1	Current Expenditure Category: Goods and Works (including supply and installation) Part A.1(a)			
1,896,830,000.00	1,856,843,449.43	1,896,830,000.00	100.00	100.00
iLap Category Sequence No: 10	Current Expenditure Category: Front-end Fee			
0.00	0.00	0.00		

iLap Category Sequence No: 11	Current Expenditure Category: Premia for Int Rate Caps & Collars			
0.00	0.00	0.00	0.01	0.01
iLap Category Sequence No: 2	Current Expenditure Category: Gds,Wks (including supply and installation) non-consul serv Part A.1(b)			
484,020,000.00	352,498,875.38	520,000,000.00	100.00	100.00
iLap Category Sequence No: 3	Current Expenditure Category: Gds, wks non-consul serv Part B.1			
22,830,360.00	22,830,360.12	22,830,361.00	100.00	100.00
iLap Category Sequence No: 4	Current Expenditure Category: Gds, Wks, CS, Non Cons Sv Part B.2			
245,000,000.00	0.00	245,000,000.00	100.00	100.00
iLap Category Sequence No: 5	Current Expenditure Category: Gds,Wks,Non CS & CS Part C.1			
395,770,000.00	216,434,393.36	280,000,000.00	100.00	100.00
iLap Category Sequence No: 6	Current Expenditure Category: CS Part C.2 and C.3			
20,000,000.00	0.00	100,000,000.00	100.00	100.00
iLap Category Sequence No: 7	Current Expenditure Category: IBRD Interest During Construction			
400,000,000.00	400,000,000.00	400,000,000.00	100.00	100.00
iLap Category Sequence No: 8	Current Expenditure Category: Other Lending Int. during Construc			
225,000,000.00	225,000,000.00	225,000,000.00	100.00	100.00
iLap Category Sequence No: 9	Current Expenditure Category: UNALLOCATED			
51,174,640.00	0.00	50,964,639.00		
Total **3,740,625,000.00**	**3,073,607,078.29**	**3,740,625,000.00**		

DISBURSEMENT ESTIMATES

Change in Disbursement Estimates
Yes

Year	Current	Proposed
0000	0.00	0.00
2010	0.00	0.00
2011	532,104,961.51	532,104,961.51
2012	4,350,059.15	4,350,059.15
2013	333,146,012.24	333,146,012.24
2014	238,355,546.28	238,355,546.28
2015	751,890,298.81	751,890,298.81
2016	496,350,040.67	496,350,040.67
2017	217,330,825.00	217,330,825.00
2018	170,509,443.00	170,509,443.00
2019	370,000,000.00	45,995,141.27
2020	359,613,115.00	178,000,000.00
2021	0.00	373,000,000.00
2022	0.00	116,000,000.00

.

Results framework

COUNTRY: South Africa
Eskom Investment Support Project

Project Development Objectives(s)

The project development objective (PDO) of the Eskom Investment Support Project for South Africa is to enhance its power supply andenergy security in an efficient and sustainable manner so as to support both economic growth objectives and South Africa's longterm carbon mitigation strategy.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	DLI	Baseline	End Target
Enhance power supply and energy security			
Generation capacity installed and commissioned (Medupi) (Megawatt)		0.00	4,800.00
Action: This indicator has been Revised			
Generation capacity installed and commissioned from renewable energy (Sere Wind Farm) (Megawatt)		0.00	100.00
Action: This indicator has been Revised			
Support longterm carbon mitigation strategy			
Direct CO2 emissions avoided under the project (Metric ton)		0.00	238,000.00
Action: This indicator has been Revised			

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets		End Target
			1	2	
Medupi Power Plant					
Direct project beneficiaries (Number)		0.00			5,500,000.00
Action: This indicator has been Revised					
Female beneficiaries (Percentage)		50.00			50.00
Quarterly Medupi Environmental Monitoring Committee meetings held and minutes distributed. (Yes/No)		No			Yes
Action: This indicator has been Revised					
Medupi construction progress rate towards completion (Percentage)		0.00			100.00
Action: This indicator has been Revised					
Number of units synchronized (Number)		0.00			6.00
Action: This indicator has been Revised					
Transmission lines completed (Kilometers)		0.00			1,020.00
Action: This indicator has been Revised					
Transmission lines progress rate towards completion (Percentage)		0.00			100.00
Action: This indicator has been Revised					
Number of units handed over to commercial operations (Number)		0.00			6.00
Action: This indicator has been Revised					

Indicator Name	DLI	Baseline	Intermediate Targets		End Target
			1	2	
Renewable energy (Sere Wind Farm and Battery Storage)					
Number of wind turbines erected (Number)		0.00			46.00
Action: This indicator has been Revised					
Progress rate towards completion (Sere Wind Farm) (Percentage)		0.00			100.00
Action: This indicator has been Revised					
Support for low carbon energy efficiency comps., comprising the Majuba Railway for coal transportation & TA prog. for energy efficie ncy					
Progress rate towards completion for Majuba rail project (Percentage)		0.00			100.00
Action: This indicator has been Revised					
Number of studies for power plant efficiency improvements completed (Number)		0.00			7.00
Action: This indicator has been Revised					
Project generation capacity savings (Megawatt)		0.00			3,171.00
Action: This indicator has been Revised					
Majuba coal transportation cost (Text)		93.00		20.00	20.00
Action: This indicator has been Revised					
Energy Storage Capacity Installed and Commissioned (Megawatt)		1.00			200.00
Action: This indicator has been Revised					

.