

INTEGRATED SAFEGUARDS DATA SHEET

CONCEPT STAGE

Report No.: ISDSC1001

Date ISDS Prepared/Updated: 15-Oct-2014

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I. BASIC INFORMATION

A. Basic Project Data

| | | | |
|---|---|------------------------------|------------------------------|
| Country: | Madagascar | Project ID: | P151785 |
| Project Name: | MG-Electricity Sec Operations & Governance Improvement Project(ESOGIP) (P151785) | | |
| Task Team Leader: | Maria Isabel A. S. Neto | | |
| Estimated Appraisal Date: | 17-Feb-2015 | Estimated Board Date: | 30-Apr-2015 |
| Managing Unit: | GEEDR | Lending Instrument: | Investment Project Financing |
| Sector(s): | General energy sector (100%) | | |
| Theme(s): | Infrastructure services for private sector development (40%), State-owned enterprise restructuring and privatization (40%), Debt management and fiscal sustainability (20%) | | |
| Financing (In USD Million) | | | |
| Total Project Cost: | 65.00 | Total Bank Financing: | 65.00 |
| Financing Gap: | 0.00 | | |
| Financing Source | | | Amount |
| BORROWER/RECIPIENT | | | 0.00 |
| International Development Association (IDA) | | | 65.00 |
| Total | | | 65.00 |
| Environmental Category: | B - Partial Assessment | | |
| Is this a Repeater project? | No | | |

B. Project Objectives

The proposed Project Development Objective is to improve performance, management, and governance of the power sector of Madagascar by simultaneously addressing three key areas for sustainable development: (i) planning (including access) and implementation of outcomes; (ii) operations for electric service provision; (iii) financial viability.

C. Project Description

20. The estimated total financing required for the currently proposed Madagascar ESOGIP is approximately US\$80.0million. This program includes urgent and priority activities for the power sector in Madagascar. Depending on Government's priorities, IDA's funding availability, and potential interest from other donors, part of this program may be financed by another party, or scaled down. As of now, other donors have expressed they would not be able to contribute immediately.

21. The proposed project has 3 components, described below:

Component 1: Strengthening power sector planning and development (US\$1.80 million)

22. This component aims to: (i) ensure planning of the optimum investments needed to develop the power sector in Madagascar, from electricity generation to the effective connection of end users, is carried in a fully systematic manner; (ii) define mechanisms to ensure effective implementation of the outcomes of the planning process; (iii) strengthen in a sustainable manner the capacity of the government agencies responsible for planning the power sector and implementation of the outcomes of the planning process. In order to meet these objectives, the component will include:

1.1. Preparation of a Least Cost Power Development Plan (LCPDP) for the electricity sector

23. As most countries do, the Government of Republic of Madagascar (GRM) must keep permanently updated its own roadmap for the development of the electricity sector in the country in the next 15-20 years. For that purpose, the competent government entity (Ministry of Energy) needs to lead the preparation (eventually based on the review and update of existing versions) of a Least Cost Power Development Plan (LCPDP) for that period, in order to define the investments needed in all the segments of the electricity supply chain (from generation, transmission, and distribution to consumers' connection). The LCPDP should be prepared starting from recent reliable demand forecasts (an update of existing projections would be needed), based on priorities in areas to be electrified and type of electricity services to be provided (including transitory stages until full electrification is achieved). Other key inputs are the scenarios to be defined by the GRM in terms of energy mix for electricity generation (hydropower and other traditional resources, renewables, etc.). This sub-component will finance the consultancy services required for the preparation of the LCPDP. The Studies and Planning Department in the Ministry of Energy will be responsible for and lead the preparation of the LCPDP, with technical support from JIRAMA, ADER and ORE.

1.2- Definition of a strategy and action plans to increase electricity access countrywide

24. In countries with low electrification rates like Madagascar, a key component of the planning process, which in general is addressed separately and complements the LCPDP, is the definition and effective implementation of the action plans to increase access to electricity services ("electrification"), until full coverage is achieved. The definition of a strategy for electrification of the country is a government responsibility, and should comprise setting priorities, ensuring funding (grants, loans, national budget, tariff revenues, etc.), defining optimum technical solutions for specific situations, and putting in place implementation arrangements (roles and responsibilities of government agencies, the national utility, etc.). Best technical solutions and implementation arrangements for electrification in urban and peri-urban areas could be different from the most adequate for rural areas.

25. This sub-component will finance the consultancy services required for the definition of a strategy and action plans to increase electricity access in the whole Madagascar.

1.3- Strengthening institutional and operational capacity of government agencies responsible for planning

26. This sub-component will include actions aimed at strengthening the institutional and operational capacity of the Ministry of Energy and other government agencies responsible for planning and implementation of the electrification strategy, to ensure that they are able to effectively carry out those critical tasks on a long term basis.

1.4-Assessment of the existing pricing systems for electricity services, identification of improvements needed to achieve financial viability and approaches for implementation

32. This component will finance the execution of studies needed to improve the pricing system for electricity services in Madagascar in order to ensure the financial viability of the power sector of the country.

33. The “steady state” to be achieved in terms of financial viability of the power sector is the application of a tariff system, eventually complemented by a social safety net aimed at protecting low income consumers (ie, targeting subsidies to those who cannot afford to pay cost-reflective rates), resulting in allowed revenues (AR) of the utilities that ensure full recovery of total costs of efficient service provision. However, it may be necessary to adopt a phased approach, as the application of the “steady state” system may not be viable in the short term in a low-income country like Madagascar, additionally facing high electricity generation costs. On the one side, it could be a gap between the current low average tariff level and that required to recover efficient costs of service provision.. On the other side, the cost reflective average tariff level could also be higher than the current average ability to pay for electricity service of the consumers in the country. The assessment of the current average ability to pay for electricity service of consumers in Madagascar is a key component of any plan aimed at improving the pricing system. The study will thus assess the affordability and willingness to pay electricity services of customers in Madagascar.

34. Once the new tariff system is defined, it becomes critical to design and effectively implement a socially and politically acceptable “glide path” for its effective application, which should be done together with the deployment of a social safety net aimed at protecting low income users unable to pay cost reflective rates.

35. Taking into consideration the preceding comments, the component will include the development of consultancy services to address the following tasks:

- Assessment of current average ability to pay for electricity services
- Determination of the most adequate methodology for tariff setting to be applied in the short and medium term.

Design of a socially and politically acceptable “glide path” for the effective application of the proposed methodology and related tariff charges, eventually complemented by a social safety net aimed at protecting low income users unable to pay cost reflective rates. The assessment should also address the level of support needed from the government budget and its affordability to the government.

Component 2: Improving operational performance and governance of JIRAMA in key business areas (US\$76.0 million)

35. This component will comprise the preparation and effective implementation of a Business Plan (BP) for JIRAMA for a 3-year period, focused on improving efficiency, transparency and accountability of performance of JIRAMA in the key operations areas (electricity supply, commercial functions, management of corporate resources) on a sustainable manner, with specific emphasis on better service quality and loss reduction.

33. The key components of the BP will be:

- Definition and implementation of an optimum organizational structure, including: (i) description of functions and responsibilities of positions at all levels and definition of skills required for each position; (ii) selection of staff to occupy positions at all levels through competitive and transparent (publicly disclosed) processes with support of specialized consultants.
- Incorporation of management information systems (MIS) to make more efficient, transparent and accountable the development of processes and activities in all business areas: operation and maintenance (O&M) of assets for electricity supply and attention of customers' claims; commercial functions; and management of corporate resources. Incorporation of the MIS must be complemented with the improvement and update of their respective databases (customers, assets, etc.) supported by a geographic information system (GIS).
- Implementation of a revenue protection program (RPP) for sustainable reduction of non-technical losses in supply (unmetered consumption) through systematic remote recording and monitoring of consumption of large users. The initial phase of the RPP should include all customers supplied in medium voltage (MV; around 700, representing 42% of physical sales in 2013), as well as the largest low voltage (LV) users.
- Execution of urgent investments in rehabilitation/upgrade of facilities for electricity supply (generation, transmission, distribution) and metering needed to improve service quality to acceptable levels
- Reinforcement of transmission facilities (Ambohimambola interconnection substation): US\$ 5.5 million
- Rehabilitation/upgrade of distribution networks (5 to 35 kV): US\$ 26.6 million.
- Installation of 5 x 6 MW new generation capacity running on heavy fuel-oil (HFO) to meet demand at Antananarivo to be installed at the site of an existing power plant in Ambohimambola, including power transformers, switchgear and cables for connection to the network: US\$ 30 million

Component 3: Project management (US\$1.5 million)

34. This component will support project management related issues through the recruitment of FM, procurement and social and environmental safeguards experts as the need may be, preparation of project safeguards studies, financing of audit, office equipment and incremental operating costs.

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Project will have a nationwide coverage with a specific focus around the large cities in throughout the country.

E. Borrowers Institutional Capacity for Safeguard Policies

Madagascar has its environmental institutional and regulatory frameworks managed by the National Office of Environment (NOE). The regulatory framework clearly spells out the environmental (and

social) permitting procedure and the obligations of project developers as regards the implementation of the environmental and social management plan (ESMP) following the principles and procedures mentioned under MECIE (Mise en Compatibilité des Investissements avec l'Environnement). The Directorate of Environmental Assessment ("Direction des Evaluations Environnementales) within NOE office has the overall responsibility of enforcing the environmental (and social) assessment procedure through the approval of required instruments, namely the Environmental and Social Impacts Assessments (ESIAs) and the monitoring of site specific Environmental and Social Management Plans (ESMPs). Moreover, this department is considered to have adequate capacity and relatively fair technical experiences in the processing of World Bank operational safeguards policies. Nevertheless, the project will be owned and operated by the Ministry of Energy and JIRAMA (The national Power and Water public company) whose experience and capacity in environmental management are not known yet. An initial mission was undertaken in June 2014 to scope out the likely project components and to identify possible environmental and social safeguard risks associated with subprojects being funded under the project and evaluate the capacity of JIRAMA and the Ministry of Energy to address comply with the World Banks safeguards requirements. It is anticipated that: (i) all of the physical components will be implemented by JIRAMA, (ii) The JIRAMA already led environmental and social impact studies for the rehabilitation of some infrastructures following the 1998 national environmental law; (iii) the capacity of JIRAMA to understand and implement safeguards requirements is weak and requires further strengthening. To that extent, during appraisal the team will discuss the necessary requirements for this strengthening; this would likely involve the hosting of a social and environmental safeguards unit comprised of 1 social scientist and 1 environmental scientist to act as Social and Environmental Focal Points of the project. These will work closely with ONE and be trained and mentored, throughout the project lifecycle by World Bank safeguards specialists in the project.

F. Environmental and Social Safeguards Specialists on the Team

Cheikh A. T. Sagna (GSURR)

Paul-Jean Feno (GENDR)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

| Safeguard Policies | Triggered? | Explanation (Optional) |
|---|-------------------|---|
| Environmental Assessment OP/ BP 4.01 | Yes | Under component 2, the proposed project plans to conduct civil works to rehabilitate/construct or upgrade existing facilities for electricity supply (generation, transmission, distribution). The project also proposes to reinforce the transmission facilities (Ambohimanambola interconnection substation); rehabilitation/upgrade of distribution networks (5 to 35 kV) with installation of new generation capacity running on heavy fuel-oil (HFO) and supply and installation generating units running at the site on an existing power plant in Ambohimanambola, including power transformers, switchgear and cables for connection to the network. The main foreseen environmental and social adverse risks and |

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| | | <p>effects are related to: (i) noise over the acceptable standards for residential areas; (ii) air pollution and contribution to greenhouse gas emission from the generating units smokes; (iii) liquid waste (used oil) generation inducing the pollution of surrounding area and underground water ; (iv) occupational health and safety risks in case employees are not equipped with appropriate protective materials; (v) any machinery accidental risks; (vi) sellers temporary resettlements along the transmission line during the works, resettlement risks for any transmission line extensions, ...etc.</p> <p>Considering the nature and magnitude of potential environmental and social impacts from relatively limited scale of rehabilitation and upgrade works, in addition, activities supported by the proposed operation are expected to have some site specific adverse environmental and social impacts.</p> <p>An ESMF will be prepared, consulted upon and disclosed before appraisal. For the power plants, ESMPs will be prepared, consulted upon and disclosed before appraisal.</p> |
| Natural Habitats OP/BP 4.04 | No | There is no vegetation coverage in the potential project site location. The current land occupation picture shows human settlements and degraded land in the surrounding areas. |
| Forests OP/BP 4.36 | No | There is no vegetation coverage in the potential project site location. The current land occupation picture shows human settlements and degraded land in the surrounding areas. |
| Pest Management OP 4.09 | No | The project will not purchase or use pesticides |
| Physical Cultural Resources OP/BP 4.11 | Yes | A “Chance-Finds” approach, embedded in the ESMF will be adopted to ensure adequate management of such encounter. |
| Indigenous Peoples OP/BP 4.10 | No | There are no indigenous peoples living in the project targeted areas. |
| Involuntary Resettlement OP/BP 4.12 | Yes | Some sellers occupied along transmission lines which may need temporary displacement during the works or risks of resettlement with the transmission line extensions. A Resettlement Policy Framework will be prepared, consulted upon and disclosed before appraisal. |

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| Safety of Dams OP/BP 4.37 | No | The project will not include construction or utilization of dams. |
| Projects on International Waterways OP/BP 7.50 | No | N/A |
| Projects in Disputed Areas OP/BP 7.60 | No | N/A |

III. SAFEGUARD PREPARATION PLAN

A. Tentative target date for preparing the PAD Stage ISDS: 30-Jan-2015

B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing¹ should be specified in the PAD-stage ISDS:

Since project has yet to define the exact sites of investments and the technical studies are not yet available at this stage of project preparation, the Borrower will prepare frameworks for Bank's review before appraisal stage : Environmental and Social Management Framework (ESMF), Environmental and Social Management Plans (ESMPs), and a Resettlement Policy Framework (RPF).

IV. APPROVALS

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|----------------------------------|-----------------------------------|-------------------|
| Task Team Leader: | Name: Maria Isabel A. S. Neto | |
| <i>Approved By:</i> | | |
| Regional Safeguards Coordinator: | Name: Alexandra C. Bezeredi (RSA) | Date: 15-Oct-2014 |
| Practice Manager/ Manager: | Name: Lucio Monari (PMGR) | Date: 15-Oct-2014 |

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.