# INTEGRATED SAFEGUARDS DATA SHEET
# CONCEPT STAGE

**Report No.**: ISDSC5668

**Date ISDS Prepared/Updated:** 22-Apr-2014

**Date ISDS Approved/Disclosed:** 26-Apr-2014

## I. BASIC INFORMATION

### A. Basic Project Data

| | | | |
|---|---|---|---|
| **Country:** | Uganda | **Project ID:** | P133312 |
| **Project Name:** | Uganda Energy for Rural Transformation III (P133312) | | |
| **Task Team Leader:** | Somin Mukherji | | |
| **Estimated Appraisal Date:** | 27-May-2014 | **Estimated Board Date:** | 02-Oct-2014 |
| **Managing Unit:** | AFTG1 | **Lending Instrument:** | Adaptable Program Loan |
| **GEF Focal Area:** | Multi-focal area | | |
| **Sector(s):** | Other Renewable Energy (100%) | | |
| **Theme(s):** | Rural services and infrastructure (100%) | | |

**Financing (In USD Million)**

| | | | |
|---|---|---|---|
| Total Project Cost: | 118.90 | Total Bank Financing: | 100.00 |
| Financing Gap: | 0.00 | | |

| Financing Source | Amount |
|---|---|
| BORROWER/RECIPIENT | 10.00 |
| International Development Association (IDA) | 100.00 |
| Global Environment Facility (GEF) | 8.90 |
| Total | 118.90 |

| | |
|---|---|
| **Environmental Category:** | B - Partial Assessment |
| **Is this a Repeater project?** | No |

### B. Project Development Objective(s) / Global Environmental Objective(s)

#### 1. Project Development Objective(s)

The program's long-term objective of rural area transformation is retained in this project because it is as relevant now as it was when the program was first designed. It is also clear that some

changes are needed in view of the implementation experience, changing conditions in the power and ICT sectors, and changes in the Ugandan economy.

The project development objective is to increase rural access to electricity.

**2. Global Environmental Objective(s)**

The GEF objective is to increase the use of renewable energy and promote energy efficiency. Energy efficiency was not originally included in the long-term program but was added during Phase I when Uganda's unexpected shortage of power at peak times created an opportunity to initiate energy efficiency measures.

These objectives will be achieved by accelerated investments and shifting from the case-by-case approach of ERT-1 to processing projects through the institutional framework developed during implementation of ERT-2.

## C. Project Description

The proposed Project will be designed in line with the 2001 description of the ERT Program as approved by the World Bank and the GEF Council with minor adjustments needed to reflect better the current country and sector context and requirements. It will provide US$100 million (eq.) in IDA funds (as a Credit) and US$8.9 million in GEF funds (as a Grant). The proposed components are shown below with initial cost estimates and an indicative financing plan. The GoU is preparing a "Project Summary" paper that will include a complete proposal on project components (including cost estimates) and their financing and implementation arrangements. These details are expected to be in line with discussions held during the last preparation mission (June 2013) and will be used for further processing of the proposed Project.

Component 1: Rural Energy Infrastructure: (US$95.4 million – US$82.3 million IDA, US$3.1 million GEF; US$10.0 million GoU). On-grid investments will finance all on-grid activities. Off-grid investments will include installation of fixed solar home systems (SHS). Possibilities are being explored to include financing of mobile solar systems as well on a pilot basis under collaboration with the Africa Lighting Initiative. All on-grid activities will be implemented by REA. For implementation of off-grid activities (SHS), the implementation arrangements are under discussion. Technical Assistance will be provided to finance the necessary consultancy services and training.

Component 2: Energy Development, Cross Sectoral Links and Impacts Monitoring: (US$17.4 million – US$13.0 million IDA, US$4.4 million GEF). This component will finance installation of solar PV systems for institutions such as schools, health centers and water pumping stations – as was done for the ERT-2, these will be implemented by the respective line ministries (i.e., MoH, MoE&S and MWE). The PSFU will continue with their successful investment components such as Power Factor Correction Equipment, Solar Water Heaters and Private Sector Small Hydropower Development etc. It could also include supporting the Efficient Cooking Stove initiative that is currently under discussion and funded by a Russian Trust Fund. Finally, the UECCC will utilize their portion of funds to facilitate local commercial finance by providing credit enhancement products such as partial risk guarantees, and other refinance facilities. Technical Assistance provided under this component will finance the necessary consultancy services, capacity building and operations costs as agreed.

Component 3: Renewable Energy Development: (US$ 6.1 million – US$4.7 million IDA, US$1.4 million GEF). This component will finance development of other renewable energy resources such as

geothermal energy, studies for small hydropower development etc., and will be implemented by the MEMD. Technical Assistance provided under this component will finance the necessary consultancy services, capacity building and operations costs as agreed.

Changes in Project Design:
The proposed design and preliminary allocation of funds responds to the implementation experience of ERT-1 and ERT-2 as well as overall changes in Uganda's economy and the power sector as described below.

Changes Based on Implementation Experience of ERT-1 and ERT-2
Based on implementation experience of ERT-1 and ERT-2, the most significant change in project design is to drop the Information and Communication Technology (ICT) component. Although, under the ERT-1, there was a general increase noted in the usage of mobile phones and internet services in the project areas, there has been no conclusive evidence to attribute this to the project. Additionally, despite the slow implementation of the ICT component of the ERT-2, the ICT sector has steadily grown by about 30 % mainly through private sector led investments. However, this has started in the urban areas and is expected to expand and gradually cover the rural areas as well. In view of this, the GoU is considering not to borrow any further from IDA in support of the ICT sectoral development. On providing connections to agro-industries, other donors (such as the USAID) have shown interest in financing electricity connections for the agro-industry. This will be supplemented by GoU budgetary support to promote further growth of the industry. Consequently, no support to the Ministry of Agriculture, Animal Industries and Fisheries (MAIIF) has been considered under the proposed Project at this time. Finally, in terms of providing PV systems to schools, the Ministry of Education and Sports (MoE&S) has demonstrated satisfactory implementation capacity and will carry out these installations. As such, contrary to the ERT-2 design of supporting the capacity building of the MoLG through their implementation of PV systems for schools, the current project design will not require the Ministry of Local Government (MoLG) to implement any new PV systems for schools.

Changes Based on Sectoral Development
While the design of ERT-1 and ERT-2 was guided by the policy parameters of the RESP-1, the design of the proposed ERT-3 will be guided by the policy directives of the recently approved RESP-2. For each Service Territory, the relevant Service Provider will be accountable for increasing access, both on-grid and off-grid. Agreed targets will form a part of performance indicators and will be included in a "Lease Agreement" between REA and individual SPs. While capital financing for on-grid electrification shall be provided under a system of long-term leasing and financing contracts to be concluded with the SPs, off-grid electrification services comprised of other energy service technologies not dependent on grid electricity shall be planned, offered and supplied to eligible consumers in the STs in tandem with on-grid electrification services.

Changes Based on Implementation Arrangements
The recent approval of the RESP-2 will lead to significant changes in implementation arrangements for on-grid connections that are aligned with the principles developed under the AF-ERT-2. Unlike implementation of the RESP-1, where accountability for increasing access was not clearly defined, under the RESP-2, the SPs will be responsible for carrying out connections and increasing access. Given the overall financial weakness of the SPs, REA will procure service connections materials (that will be financed through the proposed Project) in bulk and have them delivered at the individual stores of the SPs. As a part of common utility practice, the SPs will finance consumer connections through advances paid by the consumers. Through special arrangements as stipulated in the legal

agreements between REA and individual SPs, the recipient SPs will pay back REA the cost of materials received in a manner satisfactory to REA and individual SPs. These amounts will be deposited in a dedicated account managed by REA who will then reuse these funds for future procurement and supply of service connection materials. Thus, the recycling of funds – "Revolving Funds" will make additional funds available even after the project financing has ceased. Appropriate audit arrangements (non-consultancy services) will be in place to verify the connections made including adherence to technical standards. This will ease the shortage of funds somewhat (para.11) but more funds will still be needed to attain the target of "Vision 2040". For development of off-grid electrification, on the solar home systems, implementation experience of the SHS under the ERT-2 through the Photo-Voltaic Targeted Market Approach (PVTMA) has not been satisfactory. During the four year period (2009-2013), only 6817 SHS were installed, that too on a highly subsidized basis. This is very low compared with some of the better implementation experiences in other countries. As such, the GoU is considering several options that will aim at accelerating the installation of SHS including extending refinancing facilities to solar vendors on the basis of a declining subsidy regime leading to its ultimate removal.

Changes on Monitoring and Evaluation

Under ERT-2, overall, 109,000 new connections were expected to be made; of this, 52,000 connections were to be installed on newly built grid schemes within the project areas (new areas ) and 57,000 connections were to be installed on the existing grid system outside the project areas (old areas). As explained earlier (para. 16), delays in implementation of new grid schemes had undermined any initiative to increase access in the new areas. Also, since the ERT-2 project design did not allocate any separate funds for procurement of connection materials, the project could not finance any new connections. However, during implementation of ERT-2, some connections were made outside the ERT program in the existing distribution networks (old areas) from sources other than the project (non-ERT program). Linkage of project performance to the availability of funds from sources other than the project (non-ERT program) and relevance of its monitoring and evaluation was discussed during preparation of the AF-ERT-2. This has been considered not reflective of the project's implementation performance; as such connections made outside the ERT program could not be attributed as an output of the ERT-2. At the time of the original Closing Date of the ERT-2 (June 30, 2013), no connections had been made on account of the ERT program.

In order to address this issue, financing for service connection materials was arranged and the GPOBA grant (US$5.5 million) and the AF-ERT-2 credit (US$12.0 million) – both linked to the ERT-2, were approved. Together, these will play a crucial role in increasing electricity access in rural areas and are expected to finance about 120,000 connections by project closing that has now been extended until the end of FY16. This will facilitate meeting the targets for the ERT-2 (109,000) and through scaling up (to 120,000 connections), accelerate the electricity access agenda.

Changes Based on National Developments

The RESP-1 did not meet all its intended objectives. Unlike the earlier RESP-1, where electricity access was expected to increase through targeting electrification such as in areas within one kilometer on either side of the distribution line (1-km foot print), the RESP-2 takes an area coverage approach, whereby the country is covered and divided into 13 STs each to be served by an SP that will be responsible for all management, operational and maintenance activities within its dedicated/ assigned territory. Its design has also taken cognizance of the United Nations (UN) initiative on modern energy for all – Sustainable Energy for All (SE4ALL) which calls for all governments to ensure the availability of clean and affordable modern energy in all homes by 2030.

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

The project is expected to be implemented in selected areas across the country. The salient physical characteristics are prominent in the power-line construction sub-components, which shall involve excavations and earthworks, vegetation clearance of both grass and trees, formation of murram bunds for pole structures in wetland areas, creation of wetland access paths, establishment of equipment storage areas, land take/ displacement of land-uses and thus associated compensation.

### E. Borrowers Institutional Capacity for Safeguard Policies

Through implementation of ERT-1 and ERT-2, MEMD and REA have had substantial safeguards capacity developed over time. Both institutions, being the main implementing agencies have Environmental Specialists. However, whereas MEMD has a Social Development Specialist, REA does not have, and instead has a Wayleaves Officer who supervises compilation and implementation of RAPs. The implementing institutions have also occasionally hired consultants to undertake safeguards studies and supervision. Regular environmental monitoring and reporting was undertaken by REA under ERT-2. In order to address the staffing shortage, REA has recruited two Environmental Specialists and have also been recommended to recruit a Social Development Specialist to handle social issues. In terms of environmental institutional set up, the overall environmental management is under the Ministry of Water and Environment (MWE) policy-wise, and the regulatory function being undertaken by the semi-autonomous National Environment Management Authority (NEMA). NEMA as the principal agency for management of environment is charged with the duty of coordinating monitoring and supervising all activities in the field of environment. They undertake among other functions review and approval of ESIAs and conducting compliance monitoring. However, during ERT-2, NEMA's participation in oversight compliance monitoring of the projects was minimal and this could be attributed to NEMA's under-staffing and inadequate operational resources. In terms of environmental policies and laws, there are in place the Environmental Management Policy, the National Environment Act, and the EIA Regulations, Environmental Audit Regulations and other associated laws and regulations that are adequate to guide the management of environmental aspects at country level. The only challenge relates to weak institutional coordination and enforcement of the laws. Ministry of Lands, Housing and Urban Development is in-charge of land and compensation related matters and the approval of compensation rates and property valuation reports. Property valuation is undertaken by hires consultants. However, during ERT-2, there has been apparent low commitment to compensate PAPs before start of the construction activities and this resulted in a number of complaints from the affected communities.

### F. Environmental and Social Safeguards Specialists on the Team

Herbert Oule (AFTN3)

Constance Nekessa-Ouma (AFTCS)

## II. SAFEGUARD POLICIES THAT MIGHT APPLY

| Safeguard Policies | Triggered? | Explanation (Optional) |
|---|---|---|
| Environmental Assessment OP/ BP 4.01 | Yes | Triggered because the program will support investments with potential adverse environmental and social impacts arising mostly from the construction of the 33/11 kv power distribution lines. The specific locations of all |

| | | |
|---|---|---|
| | | the physical components have not yet been determined and therefore ESMF shall be prepared, consulted upon and disclosed before appraisal. Once sites have been identified, specific ESIAs and ESMPs shall be prepared. For now, two powerline routes are known and thus two ESIAs shall be prepared in a consultative manner, and disclosed before project appraisal. |
| Natural Habitats OP/BP 4.04 | Yes | Triggered because some power lines may pass through and affect natural habitats such as forests, and wetlands. Any likely impacts shall be addressed through the ESMF, specific ESIAs and ESMPs. |
| Forests OP/BP 4.36 | Yes | Triggered because some power lines may pass through forest areas with a potential of causing adverse impacts. Any likely impacts shall be addressed through the ESMF, specific ESIAs and ESMPs. |
| Pest Management OP 4.09 | No | Not triggered because the project will not involve use of pesticides or pest management. |
| Physical Cultural Resources OP/ BP 4.11 | Yes | Triggered because of the civil and earthworks during construction of the power lines -- which may affect or involve physical cultural resources. A chance finds procedure shall be developed as part of the ESMF. |
| Indigenous Peoples OP/BP 4.10 | TBD | The project proposes to have a grid extension lines in Rwenzori area along Karugutu - Ntoroko including Semiliki Safari Lodge and on North West region for Buseruka - Kabaale - Kasio Tonya - Kyenzige, areas with possible settlements of Batwa. This will be established and defined during the preparation process, prior to appraisal to take the necessary steps, including the possible preparation of an Indigenous Peoples Planning Framework. |
| Involuntary Resettlement OP/BP 4.12 | Yes | Triggered because the project may involve land take and displacement of land-uses, limiting access and livelihoods. An RPF shall be prepared, consulted upon and disclosed before appraisal and when specific locations are known, RAPs shall be prepared. For the current two sites that have been determined, the RAPs shall be prepared following a consultative process and disclosed before project appraisal. |

| | | |
|---|---|---|
| Safety of Dams OP/BP 4.37 | No | N/A |
| Projects on International Waterways OP/BP 7.50 | No | N/A |
| Projects in Disputed Areas OP/BP 7.60 | No | Not triggered because the project will not be implemented in disputed areas. |

## III. SAFEGUARD PREPARATION PLAN

**A. Tentative target date for preparing the PAD Stage ISDS:** 31-Jan-2014

**B. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing[1] should be specified in the PAD-stage ISDS:**

The preparation of the frameworks for the project, namely ESMF and RPF commenced in August 2013, and is currently being reviewed by the Bank. Preparation of specific safeguard instruments notably ESIAs and RAPs for the two known power lines will commence in September 2013 and shall be completed and disclosed before appraisal. Appraisal is expected to take place in mid-2014. Any remaining ESIAs, RAPs and ESMPs shall be prepared during project implementation phase but immediately after confirmation of specific sites and before startup of any construction works.

## IV. APPROVALS

| | | |
|---|---|---|
| Task Team Leader: | Name: Somin Mukherji | |
| ***Approved By:*** | | |
| Regional Safeguards Coordinator: | Name: Alexandra C. Bezeredi (RSA) | Date: 22-Apr-2014 |
| Sector Manager: | Name: Lucio Monari (SM) | Date: 26-Apr-2014 |

Public Disclosure Copy

[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.