1.0 Introduction

Bujagali Energy Limited (BEL) is owned by SG Bujagali Holdings Ltd (an affiliate of Sithe Global Power LLC), Jubilee Insurance Company Ltd., as well as the Africa Power Platform PCC, which is owned by CDC (the UK’s Development Finance Institution), the Aga Khan Fund for Economic Development (AKFED) and IPS Kenya (“the Sponsors”). Operations and Maintenance Energy (Uganda) Limited (O&ME) operates the Hydropower project.

The Bujagali Project is a 250MW hydropower facility — developed through a build-own-operate-transfer (BOOT) model — on the Victoria Nile River near the town of Jinja. It reached financial close in 2007, eight years after Government of Uganda (GoU) liberalized its electricity sector in 1999. When commissioned in 2012, it did not only displace expensive emergency power generation, but also contributed towards paving the way for a handful of other smaller scale IPPs that will provide more than 200 MW of small hydro, solar, and bagasse power to the network by around 2020.

However, to drive the country’s industrialization program, the GoU is actively looking for ways to reduce the country’s electricity tariffs. In this context, and based on the projected tariff profile, the Bujagali tariff is set to increase from 11.3 US cents/kWh in 2016 to 13.3 US cents/kWh in 2018 and to 14.7 US cents by 2023 due to end of a tax ‘holiday’ (accelerated depreciation) and the debt amortization — before decreasing to 7 US cents/kWh from 2024. This tariff trajectory for 2018 – 2023 is now considered to be too high and AfDB was approached by BEL, at the behest of GOU, to restructure Bujagali’s existing debt along with some of the other lenders with a view to reducing Bujagali’s bulk supply tariff.

Whereas the proposed restructuring of the debt is purely financial in nature, and no construction of new facilities is planned, and further considering that the previous Environmental and Social Due Diligence (ESDD) process initiated by a consortium of international lenders in 2006/7 was to support the original debt financing which covered the construction and operational phases of the Bujagali Hydropower project (Bujagali or Plant) which began commercial operations in August 2012, the just concluded ESDD was conducted in order to better understand the current environmental and social status and performance associated with, and could be a consequence of, the ongoing Bujagali operation. The current ESDD is therefore intended to further inform management actions that BEL needs to undertake to ensure environmentally and socially sound implementation of the Plant going forward.

The requirement for the current ESDD has been necessitated by the introduction of some new lenders and the fact that the AfDB has recently introduced and adopted a new set of Operational Safeguards to which all its operations are expected to comply.

In 2006, the Environmental and Social Assessment undertaken for Bujagali set out the details of the project, baselines, impacts, and mitigation and management programmes for the Plant’s construction and operational phases. Since commencement of operation, BEL has commissioned annual environmental
audits conducted by SHEM Africa. The ESDD assessment has reviewed and drawn on information presented in these annual audits.

As part of the due diligence process for the proposed restructuring of the existing debt of BEL, IFC and AfDB retained the services of Reeman Consulting Pty Ltd, to conduct the ESDD review of Bujagali’s operation.

The key objectives of the ESDD included:

(i) To confirm whether the ongoing operations of the Plant meets the relevant 2012 IFC Performance Standards, the relevant EHS Guidelines, and AfDB Operational Safeguards;

(ii) To review the Inter-connection Project (IP) land acquisition process based on available documents and the IFC Performance Standard 5 (PS5) (2006) and identify any required actions, and the appropriate responsible parties to address outstanding issues (if any);

(iii) To review the alternatives to the Kalagala Offset, under implementation by the GoU, with respect to the PS6 (2006) requirements for no net loss of natural habitats impacted by Bujagali in the context of the biodiversity impacts created by the construction of the Isimba Dam; and

(iv) To undertake a desktop/expert opinion-based screening for critical habitat using PS6 (2012) and referenced to biodiversity status as of 2017.

The scope of the current ESDD includes the Bujagali site as well as any related offsite activities and/or effects including those downstream of the dam. For purposes of AfDB disclosure, this summary, has to the extent possible, been restricted to those aspects covered under the AfDB Integrated Safeguards System (ISS) requirements as contained in the applicable operational standards.

In addition to the review of the EDD report, this summary has also benefitted from a review of the following documentation:

(i) Environmental Audit of Bujagali 2016.
(ii) Bujagali Annual Environmental Performance Report 2015.

2.0 Policy, Legal and Administrative Framework

Different laws and legal instruments apply to energy-related environmental and social issues. Therefore, a number of different players are involved at various stages, including in the conduct and implementation of the Environmental and Social Impact Assessment (ESIA) process which is relevant to projects of this category.

The Ministry of Energy and Mineral Development (MEMD) is the agency responsible for overall energy sector coordination, planning, and policy. The Electricity Regulatory Authority (ERA) was established in 2000 as a sector specific regulatory agency with the responsibility for inter alia, issuing distribution and generation licenses, tariff setting, and developing and monitoring performance standards for electricity service.
The Uganda Electricity Generation Company Ltd. (UEGCL) is responsible for power generation from, and development of, certain power plants and the bulk sale of associated electricity within Uganda. It currently owns the 180MW Nalubaale hydropower station and the neighboring 200MW Kiira hydropower station. In 2003, following an international competitive tender, the Ugandan government selected Eskom Uganda Limited for the operation and maintenance (O&M) of generation plants under a 20-year concession agreement.

The Uganda Electricity Transmission Company Ltd. (UETCL) is a limited company established under the MEMD but owned by the Uganda Treasury, and remains the system operator of the transmission system and is the counterparty to power purchase agreements in the capacity of single buyer (immediately on-selling the power to the distribution companies).

The National Environment Management Authority (NEMA) is mandated to be the “principal agency in Uganda for the management of the environment” as per the National Environment Act Cap. 153. At district level, the responsibility of the management of environmental issues lies with the District Environment Office and the District Environment Committees.

For projects involving involuntary resettlement and/or need for compensation, the main pieces of legislation are the Constitution of Uganda and the Land Act. In this regard, the main participants are the Ministry of Lands, Housing and Urban Development (compensation and valuation), the respective lead agency responsible for the project, which is required to budget for the resources for compensation as well as identification and coordination of other players. In addition, the Uganda Land Commission, District Land Boards, Land Tribunals and Local Councils are involved.

Whereas financing for Bujagali was approved in 2006 before the AfDB’s Integrated Safeguards System (ISS) was in place, the current restructuring is being proposed at a time when AfDB has a new set of Operational Safeguards (OSs) with which projects financed by it (AfDB) have to comply. These OSs include: Operational Safeguard 1 (OS1) on environment and social assessment, Operational Safeguard 2 (OS2) on involuntary resettlements, land acquisition, population displacements, Operational Safeguards 3 (OS3) on biodiversity and ecosystem services for the conservation and promotion of sustainable use of natural resources, Operational Safeguard 4 (OS4) on pollution prevention and control, hazardous materials and resource efficiency which covers a wide range of impacts arising from pollution, wastes and hazardous materials management and Operational Safeguard 5 (OS5) on labour conditions, health and safety, all of which are a major concern in projects that are financed by AfDB. All these operational safeguards are in one way or another applicable to the scope of the current ESDD.

3.0 Project Description

The existing 28 m high Bujagali Hydropower Plant is located at the former Dumbbell Island on the Victoria Nile approximately 8 km north (downstream) of the Owen Falls dam. Its associated reservoir inundates an area of 388 ha extending back to the tailrace areas of the Nalubaale (previously known as Owen Falls) and Kiira (previously known as Owen Falls Extension) Hydropower facilities. The water being used by Bujagali is therefore the same as that released by the Nalubaale and Kiira dams, i.e. it is essentially a run-of-river scheme.

The Plant comprises of a spillway and intake structures as well as a powerhouse containing five 50 MW Kaplan turbines. Other facilities which are part of Bujagali include: the substation (switch yard) and associated transmission equipment, a control room, relay rooms, telecommunications facilities, station
services, battery room, standby diesel generator, workshop and storage facilities, offices (including the offices BEL is based in), and operator facilities. These are illustrated in figure 1 below.

Fig.1: Layout of Bujagali and Other Features

For the proposed project, however, the transaction will be purely financial in nature and entails restructuring of Bujagali’s debt in order to lower the Plant’s tariff during 2018 - 2023. The Sponsors, at the behest of GoU, are working with the AfDB and IFC to put in place the requisite long-term debt.

4.0 Description of the Project Environment

The boundaries of Bujagali are shown in figure 2 below, which illustrates the permanent lands (i.e. lands within the fence line managed by O&ME), and temporary lands which were used during the development, and which have since been either flooded by the reservoir or planted with trees along the boundaries and with access provided to local communities and for other services (e.g. facilities for local police).

Fig. 2: Schematic layout of project location and its environs
4.1 Socio-economic Environment

Before the Bujagali hydropower project, most of the population in the surrounding areas were, and are still, peasant farmers and petty traders. Under the Community Development Action Plan CDAP), Bujagali Energy Limited (BEL) made commitments to restore the livelihoods among the ProjectAffected People (PAPs). These included 34 households that were resettled in Naminya Resettlement Village by building them houses with all social services while others were given alternative land.

From a survey carried out in August 2011 to monitor livelihood restoration, agriculture (cultivation, animal husbandry, fish farming) support was 100% completed. This was in form of assistance to PAPs in form of poultry, piggery, cattle, aquaculture, goats and seedlings of e.g. vegetables and cassava. Other activities that have improved the socio-economic conditions of the population around the project include putting up of physical infrastructure (schools and upgrading of hospital), hospital and education support (in terms of equipment), city water and power supply, business and employment assistance (construction of business centers, market, business training, community based training in vocational skills) as well as relocation of the spirits of Bujagali. Based on the recent ESDD, the stakeholders met were generally satisfied with the relationship with BEL, with most of the PAPs having improved living conditions as compared to before resettlement and the PAPs appreciating the activities by BEL.

5.0 Potential Impacts

The environmental and social risks associated with Bujagali are considered to be limited and the environmental monitoring and mitigation and management measures being taken are deemed sufficient to address the potential risks from the operation of the power station.

5.1 Positive Impacts

5.1.1 Positive social impacts

The ESDD concludes that the relationship between communities and BEL appears to be good, and no significant community issues were identified to have arisen between communities and BEL during Bujagali’s operation. The stakeholders met were generally satisfied with the relationship with BEL. In addition, the risks to community health, safety and security are considered to be low and generally well managed with communities previously trained in use of the siren that sounds when the radial gates are opened (although refresher training is considered to be needed). There is also a plan to enhance the community alarm system by end 2017 to enable notification of downstream stakeholders by mobile phone. There is a total of 36 Army and 36-42 Police personnel at the Plant site at any one time under directive from the Government of Uganda (GoU), although with no formal agreements between BEL/O&ME and the protection forces.

With regard to the cultural property management, the AfDB Independent Review Mechanism (IRM) monitoring mission in 2012 noted that significant efforts have been made to resolve spiritual concerns, including the relocation of sprits of Bujagali and the Government has completed its update of the Cultural Properties Management Plan. The IRM Monitoring Team noted that the Ministry of Energy and Mineral Development (MEMD), BEL and the Busoga Kingdom agreed on an implementation path, whereby the Busoga Kingdom issued a Certificate of Completion to BEL upon accomplishment of the relocation of the spirits and appeasement ceremonies. This effectively marked the closure of these issues.
At the initial stages, BEL conducted an Assessment of Past Resettlement Activities and Action Plan (APRAP) to resolve legacy issues left behind by AES Nile Power, the original project sponsors who discontinued their interest in the project in 2003. Immediate corrective activities that were undertaken by BEL included: provision of new water supply hand pumps at 17 existing borehole locations and the development of a 60 km water pipeline for the surrounding communities; improvements to education facilities in the 9 affected communities, and improvements to the health facilities at the Naminya resettlement site.

5.1.2 Positive climate change impacts

Overall Bujagali has had positive environmental and climate related impacts that include increased access to hydro power which is a clean energy source that has contributed to Uganda reducing its carbon footprint and enhancing its carbon emission reduction. In the initial years of its operation, Bujagali also contributed to enabling the GoU to inject more power to the national grid thereby replacing the thermal power plants that supplied power at that time. It can therefore be inferred that the project has contributed, and will continue to contribute, to avoiding substantial amounts of Carbon Dioxide (CO₂) emissions that would have otherwise been generated by thermal plants. Bujagali is a UNFCCC CDM registered project activity and its operations avoid approximately one million tonnes per year of CO₂, or over 100 million tonnes over the design life. The current restructuring operation, however, is expected to be carbon neutral as it would not introduce additional operations that would introduce additional emissions or reductions into the atmosphere beyond those of the ongoing operation.

5.2 Negative Impacts

5.2.1 Negative ecological impacts

A greater part of the negative ecological impacts associated with Bujagali were associated with construction activities and the resulting inundation of the areas upstream of the dam. However, the restructuring operation itself is not expected to cause any further negative ecological damage beyond that already caused by the earlier project activities. Prior to construction of the Plant, ecological impacts were projected to include water pollution, habitat and associated biodiversity loss due to inundation, loss of aesthetic features, notably the water falls as well as interference to fish migration/movement due to dam construction.

5.2.2 Negative Social Impacts

As per the Bujagali SEA, there were eight communities (villages) in the direct ‘Area of Influence’ and affected by the development. In the context of Bujagali’s operation these communities are considered to be the affected or “host” communities, and include:

a. The west bank host communities:
   - Namilyango
   - Naminya;
   - Kikubamutwe;
   - Malindi; and
   - Buloba.
b. The east bank host communities:
   - Namizi;
   - Kyabirwa;
   - Ivunamba; and
   - Bujagali.

Compensation payments and other land acquisition activities for the Bujagali site were completed by late 2012 and the completion audit conducted in February 2013 identified no further compensation issues at the time. One case of outstanding compensation, related to an intra-family dispute, has however since arisen. The particular case related to a resident from Malindi who owned 3-4 acres in the quarry area of the Plant, whose father (original rights holder) had died and a family conflict ensued regarding the rights to this land and land elsewhere (outside the project area). A court case is understood to have proceeded and it was recently settled. It is understood that this land was previously surveyed and compensation has been held in escrow account. The eligible person/PAP has now been identified. Negotiations on the land value and related matters have been ongoing with Uganda Electricity Transmission Company Ltd. (UETCL) in early 2017. UETCL and BEL reported to the ESDD team that this has now been agreed and compensation will be paid forthwith. It is understood payment will be done by UETCL with funds held in escrow account from BEL.

BEL is responsible for the project’s community relations. A public consultation and disclosure plan (roughly equivalent to a Stakeholder Engagement Plan) was part of the social and environmental assessment documents and key elements are implemented on an ongoing basis, commensurate with the reduced scope and risks of the operation phase. Accordingly, BEL will develop an updated Stakeholder Engagement Plan (SEP) appropriate for Bujagali’s operational phase. In addition, BEL has a combined community and worker grievance mechanism, which BEL will review to ensure that it is appropriate to the operating phase of the hydropower plant. BEL will also provide training to its staff on its provisions, and will, as part of its community engagement, inform communities about its existence.

To prevent local fisherman getting too close to the dam, the SEP will contain periodic information sessions on the safety exclusion zone on both sides of the dam wall. BEL will supplement this by placing additional signage and distance indicators near the dam to warn away fishers from entering the safety zone. Although there is a safety exclusion zone on both sides of the dam wall aimed at preventing fishermen getting too close to the dam, it is not formally marked. BEL will supplement this by placing additional signage and distance indicators near the dam to warn away fishers from entering the safety zone. At present when fishermen do get too close, they are requested to leave by the Army/Police and are sometimes penalised, but BEL/O&ME is not involved in this process.

5.3 Social issues on the associated Bujagali Inter-connection Project (IP):

During its construction, BEL was responsible for supervision of construction of the IP, including oversight for land acquisition and preparation of the Resettlement and Community Development Action Plan (RCDAP) and other environmental and social management issues. UETCL was however responsible for compensation. The implementation of the IP RCDAP has been subject to a number of claims of inadequate compensation by UETCL, including a class action against UETCL and a complaint to the Bank’s Independent Review Mechanism (IRM) as well to IFC’s Compliance Advisor Ombudsman (CAO). Although compensation for the IP (and the Plant site) was the responsibility of UETCL, some of
the legacy land issues for the IP are still ongoing and have the potential to present reputational risks to BEL if not resolved by UETCL.

More than 300 new claims of inadequate compensation are being investigated by the CAO. It is understood that these relate to the transmission line only but some may relate to the Bujagali site.

It is important to note that the original RCDAP for the Plant was done in 2001 and compensation paid by 2003 (by AES Nile Power (AESNP) before BEL was involved), so records may not exist to validate potential claims.

6.0 Mitigation/Enhancement Measures and Complementary Initiatives

6.1 Mitigation for Social Impacts

Compensation to eligible land/property owners has been fully paid and BEL has contributed towards livelihood restoration under the RCDAP for the Bujagali site. However, for the outstanding compensation of the individual (resident of Malindi) only recently identified, if the final compensation payment is made by UETCL to the eligible individual within 1-2 months, no further action should be required. BEL is encouraged to monitor/check that UETCL pays the compensation in a timely manner.

For any new and emerging claims about inadequate compensation tagged to the IP, UETCL will be responsible for any payments.

As a way of enhancing stakeholder engagement, the SEP will specify host communities and will ensure periodic meetings between BEL personnel and both leaders and individually affected people, e.g., fishers in those communities.

6.2 Mitigation for Ecological Impacts and Habitat Loss

With respect to mitigation of impacts on biodiversity, the ESDD mission in June 2017 evaluated that BEL appears on track with respect to the commitments made for mitigating impacts on terrestrial natural habitat on site and in the Kalagala Offset, and especially to ensure no net loss for the impacted area of terrestrial habitat assessed in the 2006 Social and Environmental Assessment (SEA).

Enrichment planting and river bank stabilization measures have been, and continue to be, implemented by BEL via the Environmental Mitigation and Monitoring Plan, which details individual actions, roles and responsibilities, reporting requirements. Restoration activities are complete and BEL/O&ME continue to plant native trees and monitor the success of enrichment planting as well as for definition of the boundaries for the protection zone. These activities have been ongoing since 2008 at sites including:

- The former construction compound area;
- The remaining portion of Dumbbell Island downstream of Bujagali dam;
- Downstream of the dam on both riverbanks;
- The nine resettled communities (east and west banks);
- As boundary markers for the Plant site, and for roads leading to the new resettlement village (at Naminya); and
- Within the KFS.

However, there is need to ensure that the conditions with respect to the Temporary Lands under lease to BEL are also considered as it is required that there should be no further activities such as farming in the
The National Environment Management Authority (NEMA) is responsible for ensuring that there are no further activities undertaken in the river bank exclusion zone.

In addition, BEL’s mitigation measures to address loss of terrestrial natural habitat have included:

- Post-construction restoration of habitats through enrichment planting on islands/land not inundated but previously cleared for agriculture, to control erosion and provide roosting sites for bats and birds.
- Post-construction restoration of habitats: planting in the 100 m marginal strip along the reservoir banks, to control erosion but also to offset loss of island and river bank habitat resulting from the project.
- Post-construction monitoring of banks and stabilization activities as necessary (e.g. grass planting).

6.3 Mitigation related to river hydrology

As required by Condition (xi) of the EIA certificate of approval, BEL was expected to “Meet all technical requirements with regard to control and regulation of water flow downstream to the dam and other requirements prescribed by the Directorate of Water Resources Management with regard to hydrology of the Nile and water quality concerns”. BEL has met these requirements.

Among the terms and conditions of the water abstraction permit, BEL was required to read and record the daily amount of water abstracted and submit the readings to the Directorate of Water Resources Management (DWRM) on a quarterly basis. The company fully complies with this requirement. The project also has an up-to-date surface water abstraction permit running from 1st January 2015 to 1st January 2020 as well as a waste water discharge permit running from 26th March 2015 to 25th March 2018.

In order to avoid contamination of the river water, the plant is constructed with oil interceptors on systems that could cause oil spillage. Drums of oil in transit for maintenance activities are stored in specially designed pallets with appropriate containment in case of a spill.

6.4 The Kalagala Offset Area (KOA) as a mitigation option

During the preparation of the ongoing project, and due to involvement of multilateral finance institutions including World Bank and IFC, the general need to offset for the loss of the Bujagali Falls has been clear throughout the process of gaining approval for Bujagali. Thus, in 2001, GoU confirmed its intention to permanently seek alternative hydropower generation options to Kalagala Falls, and committed to conserve the Mabira Forest Reserve and those portions of it on both banks of Kalagala Falls that had been de-gazetted. Hence, the notion of the Kalagala Falls as an offset site was agreed in advance of BEL involvement in Bujagali.

The 2006 Bujagali SEA identified impacts that required specific action in order to align with World Bank OP4.04. Much of the area of permanent land take (~75%) was land modified for agricultural purposes, but there was loss of terrestrial natural habitat associated with reservoir inundation of areas of the Jinja Wildlife Sanctuary requiring Bujagali to achieve no net loss. There was also a need to compensate for the loss of Bujagali Falls and the falls at Dumbbell Island (plus other rapid/whitewaters) as important sites for white water rafting tourism. For impacts on natural habitat, OP4.04 required ‘offset of losses through the creation of an ecologically comparable area(s) that is managed for biodiversity’ – the GoU’s KOA was considered to fulfil this purpose.
In 2007, as part of the overall financing of Bujagali and as a guarantee to commercial lenders, the GoU and World Bank signed an Indemnity Agreement that covered the KOA.

In 2010, the Kalagala Offset Sustainable Management Plan (KOSMP) 2010-2019 was developed by Ministry of Water and Environment (MWE) under the auspices of this agreement. The plan recognises the contribution of BEL’s mitigation actions in respect of Bujagali hydropower facility.

Whereas the Kalagala Offset defines measures for ensuring sound environmental management of the Mabira ecosystem housing Bujagali Falls/Dam and which measures are intended for purposes of "counter balancing or making up for" some of the negative effects caused by Bujagali’s development on the environment, and whereas the Kalagala offset and related Indemnity Agreement can be viewed as an important mechanism towards overall sustainability objectives of the Bujagali Power Project, the ESDD indicates that there is no outstanding requirement for BEL’s contribution to the Kalagala Offset. This notwithstanding and although BEL is not a party to the KOA, the ESDD recommends that BEL should, to the extent possible, monitor developments associated with the Kalagala offset area (KOA), just in case there is opportunity for its (BEL) contribution in this regard.

It may also be worth noting that Bujagali is already operational, with several other environmental and social interventions as articulated above are well under implementation and contributing to attainment of the Kalagala offset objectives. It is also understood that the implementation of the KOSMP is still ongoing up-to 2019 and most elements of it are already under implementation by the GoU. For instance, information received from the NEMA indicated that as part of the SMP implementation, there has been demarcation of the river banks, forest boundary opening has been carried out in Mabira Forest, there is a plan for the demarcation of the forest reserve and 1500 hectares have been restored. However, the need to closely monitor the status of the SMP implementation remains.

It is also understood that some elements of the KOA are currently the subject of further discussions between the parties to the Indemnity Agreement, which are the World Bank and the Government of Uganda.

7.0 Expected Residual Effects and Environmental Hazard Management

The ESDD has also made suggestions for continuous improvement of environmental and social management which are not mandatory but are considered good practice to help Bujagali better manage its social and environmental performance and risks. Most of these actions are relevant to compliance with AfDB’s ISS requirements and are summarised below.

Table 1: Required Actions for Bujagali

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<thead>
<tr>
<th>Topic/Issue</th>
<th>Action Required</th>
<th>Rationale</th>
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<tbody>
<tr>
<td>Policy</td>
<td>1.1. Review BEL’s ESHS policies to ensure that they reflect the company’s current values, vision, and ambitions etc. and that they are relevant to the current operations. For example, the Safety Policy should be updated to include BEL’s policy rather than the contractual requirements of the operator and should also cover occupational health. Similar critical review of each of the ESHS policies is required. Once reviewed these should be clearly dated and signed off by management.</td>
<td>IFC PS1 AfDB OS1</td>
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<td>Topic/Issue</td>
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<tr>
<td><strong>Review and update ESHS MS</strong></td>
<td>1.2. Review and update BEL’s ESHS MS to ensure that its plans and procedures reflect the current operation and linkages with O&amp;ME’s ESHS MS and adequately describe the roles and responsibilities in the two organisations, and address risks and impacts which fall under BEL’s responsibilities (particularly outside of the fence line defining the permanent lands). Particular attention should be given to those activities that are not currently fully documented in the BEL ESHS MS, e.g., community emergency response, security provision by the GoU, management of temporary lands, etc. Provision for regular review should be built into the revised ESHS MS.</td>
<td>IFC PS1 AfDB OS1</td>
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<td><strong>Stakeholder engagement</strong></td>
<td>1.3. Prepare and implement a Stakeholder Engagement Plan (SEP) for Bujagali. The SEP should be formal but simple, and commensurate with the activities and risks of the plant’s operation. The plan will identify host communities and other stakeholders and ensure periodic meetings and other engagement activities between BEL and key stakeholders (not only community leaders but also individually affected people e.g., fishers). It should include a procedure for taking a log of community interactions including key subjects/issues and any outcomes. It will include provision for periodic review by BEL.</td>
<td>IFC PS1 AfDB OS1</td>
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<td><strong>Grievance mechanisms (GM)</strong></td>
<td>1.4. Review and revise the current community and worker GM to ensure it is fit for purpose for the Plant’s operation and includes a time-bound procedure for handling grievances. It will have appropriate and identifiable procedures for worker grievances. Engage communities on the updated procedure and how to access it in the normal course of ongoing stakeholder engagement. Provide basic training to key personnel, e.g., Community Liaison &amp; Environmental Officer, to implement the community GM.</td>
<td>IFC PS1 AfDB OS1 and OS2</td>
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<td>1.5. O&amp;ME should also have a grievance procedure that is specific to workers at the Plant site. All workers should be made aware of the employee grievance procedure/s and its workings.</td>
<td>IFC PS2 AfDB OS5</td>
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<td><strong>Emergency preparedness and response</strong></td>
<td>1.6. Provide a schedule for periodic refresher training with host/affected communities and other key stakeholders on community emergency response including in the event of major flooding/dam failure.</td>
<td>IFC PS4 AfDB OS1</td>
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<td><strong>Community safety and the dam exclusion zone</strong></td>
<td>1.7. Place additional signage and distance indicators near the dam to warn fishers and other river users away from entering the safety zones.</td>
<td>IFC PS4 AfDB OS5</td>
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<td><strong>Biodiversity</strong></td>
<td>1.8. To document and demonstrate alignment with requirements for invasive alien species, BEL should consolidate the information and protocols implemented for control of invasive alien species into a single management plan aligned with, or incorporated into, the existing operational EMMP.</td>
<td>IFC PS6 AfDB OS3</td>
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<td><strong>Critical habitat</strong></td>
<td>1.9. The company will provide a critical aquatic habitat assessment. That assessment should focus, but not exclusively, on the haplochromine species of fish.</td>
<td>IFC PS6 AfDB OS3</td>
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<td>Topic/Issue</td>
<td>Action Required</td>
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<td>1.10. Should the critical habitat assessment confirm that Bujagali is in critical aquatic habitat, BEL will prepare a biodiversity action plan (BAP) that contributes toward net gain in the protection of the aquatic species that triggered critical habitat via reasonable actions within BEL’s control. Given existing monitoring by the project (e.g. NaFIRRI fish surveys) and management of the KFS by Government of Uganda and World Bank, no significant changes to existing practices by BEL and agreed SEA commitments from the original investment are expected.</td>
<td>IFC PS6</td>
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<td>Kalagala Falls Site (KFS)/Kalagala Offset Area (KOA) 1.11. The company will monitor the KFS/KOA process between the Government of Uganda and World Bank regarding the original 2006 PS6 requirements. BEL will not be responsible for KFS/KOA implementation as agreed by all parties under the original investment. Annual monitoring reports on this process, based on the information provided by Government of Uganda and World Bank to BEL, will be provided to lenders.</td>
<td>AfDB OS3</td>
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<td>1.12. Should the KFS cease to exist (in the current or modified form), BEL will review 2006 requirements and develop an alternative offset approach that will address the original compliance requirements agreed between lenders and BEL at the time of the original investment via reasonable actions within BEL’s control.</td>
<td>IFC PS6</td>
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<td>AfDB OS3</td>
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### 8.0 Monitoring Program

O&ME has established procedures for monitoring relevant aspects of HSE performance and maintaining records of the monitoring results. Since 2011 (i.e. starting at the end of construction), BEL has commissioned annual environmental audits prepared by SHEM Africa – with the latest one dated March 2017. These are submitted by BEL as its Annual Monitoring Reporting (AMR) to lenders fulfilling monitoring and reporting requirements connected with its loan agreement. The Environmental Audits were also intended to report on environmental monitoring status against the issues that were underscored in the approved SEA of 2006 by NEMA. This is being done in line with Section 22(3) of the National Environment Act which requires the owner of the premises or the operator of a project for which an environmental impact statement has been made, to keep records and make annual reports to the authority describing how far the project conforms in the operational phase with the statements made in the environmental impact statement. Water quality monitoring is also done on a quarterly basis by an external ISO certified lab; SGS Kenya Limited Laboratory Services.

In addition to the SHEM Africa audits, there has also been biannual aquatic ecology monitoring (covering water quality, fish, fish catch, sanitation and disease vectors) on behalf of BEL since April 2012 by National Fisheries Resources Research Institute (NaFFIRI) based in Jinja. In summary therefore, it is considered that Bujagali has been subject to regular and constructive environmental audits and monitoring through construction and into operations. This ESDD assessment has reviewed and drawn on information presented in these documents.

O&ME also contracted services for an external audit on its internal safety, health, environment and quality management systems. The audit was conducted by a company called AENOR from Spain. A resettlement completion audit was also undertaken in 2013 by Channel Research Limited on behalf of BEL, which was a requirement of the investment agreement. Overall the ESDD observes Bujagali has
been subject to regular and generally constructive audits and monitoring through construction and into operations and that the environmental monitoring and mitigation and management aspects are sufficient to address the potential risks from the operation of the power station.

Since the commissioning of Bujagali, there have also been lender visits and assessments such as by AfDB’s monitoring in September 2012, and IFC’s two site supervisions (28th April – 1st May 2013, and 26th – 30th January 2015). Project monitoring by lenders is expected to continue as part of their routine supervision missions.

9.0 Public Consultations and Public Disclosure

The ESDD preparation process which commenced on 8th May 2017 involved among others:

- Information review of the documentation provided by the IFC, AfDB, BEL, O&ME and key external stakeholders,
- Site visit to the Bujagali hydropower facility and other relevant locations conducted from 5th-9th June 2017, and included stakeholder meetings in the vicinity of the Bujagali hydropower facility, Jinja, and Kampala as well as engagement with selected internal and external stakeholders; and
- Interviews and meetings conducted with internal and external stakeholders in Uganda.

The ESDD team met with key stakeholders representing key agencies that included, among others; BEL, O&ME, IPS, Sithe Global, UETCL, NEMA, MWE, MEMD, NaFFiRI, National Forest Authority (NFA), InterAid, Wild Waters Lodge, Local Chairpersons (LC1) as well as Fisherpersons/residents.

Since operationalization of Bujagali in 2012, BEL, together with UETCL, have undertaken extensive consultations as part of the SEA implementation. In addition, BEL retained the services of a witness NGO (InterAid Africa) to provide independent monitoring of the consultation activities, and to provide a mechanism for stakeholders to file a grievance with the ESIA processes. The engagement process has involved free, prior and informed consultations with the affected communities, leading to lenders’ confirmation of broad community support for Bujagali within the affected communities.

In line with the AfDB disclosure requirements, this summary has been prepared for disclosure in the Bank’s website for a 60-day period so that interested members of the public can access it and provide feedback as appropriate before the project is submitted for Board consideration.

10.0 ESMP

It is understood that BEL will continue to implement its environmental and social management system as well as follow up on the issues identified in Table 1. It is therefore expected that BEL will continue to dedicate resources for implementation of the environmental and social components as has been the case since Bujagali’s commissioning in 2012.
11.0 Institutional Capacities and Strengthening plan:

The overall Environmental, Social, Health and Safety (ESHS) management of Bujagali is the responsibility of O&ME who have control of all operations within the fence line which runs around the ‘permanent lands’ and houses all of the project facilities, and includes managing access to the site. BEL’s ESHS Management System (MS) is subservient to O&ME’s within the fence line. BEL activities outside of the fence line link to BEL’s ESHS MS, including on the ‘temporary lands’ awarded to BEL. These two systems are considered complementary to each other, and hence, overall, the ESHS management at Bujagali is considered to meet the relevant international standards.

Considering the project is an ongoing operation, there is expected to be no change in the operational implementation arrangements of the project as the existing arrangements are expected to remain in place, with the O&M contract (with O&ME, which is an affiliate of Spain’s Gas Natural Fenosa) having been renewed earlier this year for five years.

12.0 Conclusion

The ESDD audit concluded that the environmental and social aspects of Bujagali operation are being well managed by BEL and O&ME. The ESDD team further considered the environmental and social performance of Bujagali operation to be satisfactory and generally meets good international practice. It is also evident that the project has made commendable effort to comply with regulatory requirements and approval conditions for the project relevant to environmental and social compliance. However, the ESDD has identified a number of areas, as outlined in Table 1, requiring additional actions to ensure that the relevant environmental and social standards continue to be fully met.

13.0 References and Contacts

This ESIA summary was prepared based on information contained in the detailed ESDD report prepared following a mission in June 2017 as well as reference to past project documentation such as monitoring/annual audit reports.

For further information please contact:

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