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Appendix A.1

Terms of Reference for the Hydropower Project SEA



**Bujagali Hydropower Project, Uganda
Social and Environmental Assessment
Terms of Reference**

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1.0 Introduction

1.1 Preface

Development of the Bujagali Hydropower Project (hereinafter “Project” or “HPP”) was first initiated by AES Nile Power Ltd., (AESNP) in the late 1990’s. Among other things, AESNP prepared Social and Environmental Assessment (SEA) documentation for the Project that was approved by the Government of Uganda’s (GoU) National Environmental Management Authority (NEMA) in 1999/2001, and by the World Bank and African Development Bank Boards in December 2001. However, in 2003 AESNP withdrew from the Project. Subsequent to AESNP pullout, the GoU initiated an international bidding process for the development of the project, which was awarded to Bujagali Energy Ltd. (BEL), a project-specific partnership of Sithe Global Power (USA) and IPS Limited (Kenya).

The Board approvals by the lenders for AESNP’s project, and the permits issued by NEMA to AESNP, are both no longer valid. Thus BEL will be required to prepare and submit for approvals new SEA documentation. The SEA documentation shall need to address the requirements of NEMA, the World Bank Group, and other lenders, including the African Development Bank (AfDB), the European Investment Bank (EIB), the Netherlands Development Finance Company (FMO), and others. Many of these entities have their own nomenclature for SEA documentation including “Environmental Impact Assessment”, “Environmental Impact Statement” “Environmental and Social Impact assessment”, and “Social and Environmental Assessment”. For the purposes of this project the term Social and Environmental Assessment is considered to be synonymous with the different terms used by NEMA and the various lenders.

This document provides a draft Terms of Reference (ToR) to conduct the new SEA. The objective of this SEA draft ToR is that, when finalized, will serve as the basis for conducting an SEA process, and producing SEA documentation, for the Bujagali HPP that will comply with all of the GoU and international lender social and environmental legislation, regulations, and policies.

BEL has based its preparation of this draft ToR broadly on the guidance provided in “A Common Framework for Environmental Assessment – A Good Practice Note” (Multilateral Finance Institutions Working Group on Environment, 2005). For this SEA assignment, BEL has appointed a consulting team lead by R.J. Burnside International Limited of Canada (henceforth referred to as the “Consultant”) to conduct and oversee, the SEA tasks proposed in this ToR, manage the SEA process on behalf of BEL, and author the SEA documentation to comply with GoU and international lender requirements. An organogram of the Consultant’s proposed SEA team is provided in Figure 1.

1.2 Brief Project Description

The Bujagali HPP is a proposed 250 MW hydropower facility located on the Victoria Nile about 8 km downstream (north) of the Town of Jinja, in Uganda. The design for the HPP described herein has been taken from the design developed by Scott Wilson Piesold (2004) and that was used as the design basis for the bidding process completed by the GoU. If variations be required or proposed then these will be assessed accordingly.

The Power Station will include construction and operation of the following:

- A permanent access road from the Jinja/Kayunga state highway to the Power Station on the west bank;
- A 28 m tall dam extending across the Victoria Nile at Dumbbell Island that will create a 388 ha reservoir, approximately 80 ha of which will be newly inundated land and 308 ha of which is area currently inundated by the Victoria Nile. The HPP will utilize the same water that is used by the Kiira and Nalubaale hydropower facilities that are located upstream of the Bujagali HPP at Jinja. Any water that is released by those facilities will in turn be released by the Bujagali HPP;
- A spillway system;
- Intake and powerhouse structures to accommodate five Units comprising five water turbines, five generators, five generator unit transformers, power station auxiliary equipment and associated equipment;
- A substation and associated transmission equipment up to the Boundary;
- A paved two-lane vehicular service way that permits access for service and maintenance over the entirety of the dam works and over the spillway, intake and powerhouse structures and related equipment; and,
- A Control Room, relay rooms, telecommunications facilities, station services, battery room, standby diesel generator, workshop and storage facilities, office accommodation, operators facilities, and other necessary facilities for the operation and maintenance of the Power Station.

The design described in general above is very similar to the design that was proposed by AESNP. The key differences are as follows:

- Construction of the main spillway is now to the left (west) of Dumbbell Island;
- Construction of a siphon spillway is now to the right side (east side) of Dumbbell Island as opposed to over the powerhouse; and,
- Utilisation of earth core for the dam rather than an asphalt core.

Figure 2 provides general location mapping for the Bujagali HPP and Figure 3 illustrates the proposed project layout at the hydropower site.

In addition to the hydropower generation component of the Bujagali HPP, new and/or upgraded electrical transmission facilities will be necessary to evacuate the power

from the Bujagali HPP to the Uganda system grid and load centres. The transmission facilities will be constructed, owned, and operated by the Uganda Electrical Transmission Company Limited (UETCL). UETCL has contracted BEL to assist with the development of the transmission facilities, the scope of which includes preparation of an SEA. A complementary ToR for the SEA work associated with the proposed transmission facilities accompanies this ToR for the HPP.

The transmission system as described above constitutes an “associated facility” for the Bujagali HPP based on the definition for a projects “Area of Influence” as defined in IFC’s Performance Standard 1 (2006).

For the SEA documentation required for the Bujagali HPP, a detailed description of the project shall be provided so that all interested parties will know exactly what BEL is seeking approval for from NEMA and financing for from international lending institutions. The detailed description will include all project components directly required for, and ancillary to, the project, and this will be done for both the hydropower generation and electrical transmission components of the project. BEL will undertake this project description in consultation with the GoU, and the GoU’s consultants, Scott Wilson Piesold of the United Kingdom, so that all relevant project components for the Bujagali HPP are identified in the SEA documentation.

1.3 Project Context

Uganda is currently experiencing a significant electricity shortage. All electricity customers in the country experience regular, rotating blackouts, locally referred to as “load shedding.” The need for new sources of electricity to satisfy growing demand is acute. Whilst the demand for electricity in the country is steadily growing, the ability of the country’s two major hydropower plants, the Nalubaale and Kiira power stations located on the Victoria Nile at Jinja, to meet the demand is decreasing, given the present low lake levels in Lake Victoria, upon which the Nalubaale and Kiira power stations rely. Uganda is also in discussions with Kenya and Tanzania for the development of an East African Power Pool to be shared and jointly managed by the three nations.

The SEA documentation will include a description of the need for the project, including an evaluation of other potential methods of electricity generation and management in the country to address Uganda’s electricity deficit, including conservation measures and the null, or “do nothing,” alternative. The SEA will also present information about the nature of the current and forecasted electricity deficit in Uganda. Additionally, the SEA will present information about other candidate hydropower development options for the country, as well as alternative hydropower development configurations at or near the Bujagali site. The intent of this exercise will be to provide the justification for the project’s development, as proposed by BEL. Finally, the SEA will summarize published information about the role of the

project within the East African Power Pool being considered between Uganda, Kenya and Tanzania.

1.4 Applicable Laws, Regulations and Policies to the Project

There are a number of legislative and regulatory instruments in Uganda dealing with environmental management in Uganda that are relevant to the Bujagali HPP SEA. The most important of these is the Constitution of the Republic of Uganda (1995), which is the supreme law in Uganda, but other relevant instruments are provided below. Those instruments that are new or have been updated and/or revised are asterisked:

- The National Environment Act, CAP. 153, and its Environmental Impact Assessment Regulations (1998), Waste Management Regulations (1999), Standards for Discharge of Effluent into Water or on Land Regulations (1999), Wetlands, Riverbanks, and Lake Shores Management Regulations (1999), Minimum Standards for Management of Soil Quality Regulations (2001)*, Noise Standards and Control Regulations (2003)*, and Conduct and Certification of Environmental Practitioners Regulations (2003)*;
- The Water Act, CAP. 152, and its Waste Discharge Regulations (1998), Water Supply Regulations (1999) and Sewerage Regulations (1999);
- The Rivers Act, CAP. 347;
- The Electricity Act, 1999;
- The Town and Country Planning Act, CAP 30;
- The Public Health Act;
- The Land Act (1998) and the Land Regulations, 2001*;
- The Factories Act, CAP 198;
- The Workers Compensation Act, 2000;
- The Investment Code, 1991;
- The Uganda Wildlife Act, CAP 2000;
- The National Wetlands Policy, 1995;
- The Traffic and Road Safety Act, 1998;
- The Fish Act, CAP 197 and the Fish (Beach Management) Rules, 2003*; and,
- The National Forestry and Tree Planting Act, 2003*.

In addition to the GoU requirements that will apply to the project, there are several major international lenders involved with the project, namely:

- The World Bank Group (IDA, IFC and MIGA) including specific reference to;
 - o World Bank 'Safeguard' Policies;
 - o World Bank Pollution, Prevention and Abatement Handbook (1998);
 - o IFC 'Safeguard' Policies Policies and Performance Standards;
 - o IFC's Environmental Guidelines for Electric Power Transmission; and, Distribution.
- The African Development Bank (AfDB) with specific reference to; and,
 - o Integrated Environmental and Social Assessment Guidelines (IESA);

- Environmental and Social Assessment Procedures for African Development Bank's Public Sector Operations (2001) and the Environmental Review Procedures for Private Sector Operations of the African Development Bank; and,
- Policy on Resettlement and Involuntary Displacement (2004).
- The European Investment Bank (EIB).

Lenders and others that may be involved with the project's financing have their own environmental and social due diligence requirements. The SEA will address the relevant GoU legislation and standards and international lender, policies and guidelines that apply to the Bujagali HPP. Confirmation of these requirements with pertinent agencies, lenders and external stakeholders will serve as the basis for BEL's due diligence work on legislative, regulatory and policy compliance related to the project. BEL will conduct one SEA process and produce one SEA document for the Bujagali HPP that complies with all of the GoU and lender requirements. To achieve this, the Consultant will undertake a Concordance Analysis of the various requirements to demonstrate how each has been complied with. Additional relevant requirements will be incorporated as appropriate.

2.0 Key SEA Issues to be Addressed and Tasks to be Carried Out

Building on relevant work conducted to date, BEL shall prepare comprehensive SEA documentation designed to meet the environmental and social requirements of the GoU and all proposed multi-lateral, bi-lateral and international lenders and funders of the Bujagali HPP. The SEA will assess the Bujagali HPP and its associated facilities, including any 'legacy' issues or concerns attributable to the project in its previously proposed configuration. Public consultations will engage all potentially affected communities and will be designed with the objective of providing the information required to facilitate decision making about the status of broad community support for the project, as currently proposed. The SEA documentation will include, as necessary, work on project contextual issues such as alternatives to the project in terms of generation alternatives, conservation measures, and the "do nothing" alternative and alternative methods of carrying out the project cumulative effects, decommissioning, strategic implications, and regional-level impacts, including regional development and poverty alleviation.

The following sections outline the key issues to be addressed in the SEA and provide details on the proposed tasks and scope of work for each task that BEL proposes to address these key issues.

2.1 Hydrology

BEL shall also assess the Bujagali project in terms of its generation potential under existing and historic hydrological conditions, and in terms of the potential for the project to alleviate or exacerbate any hydrological issues in the downstream environment and upstream environments, including in Lake Victoria. For the purpose

of these assessments, the Bujagali project shall be assessed both in terms of its effects on the baseline situation (Nalubaale and Kiira power stations operating), and cumulative effects in combination with feasible future hydropower developments, including the Karuma project, proposed approximately 200 km downstream. These assessments will be based upon a compilation of information from existing hydrological and power generation studies. Furthermore, maintenance of the “agreed curve” is a design component of the Bujagali project.

2.2 Bio-physical Environment

2.2.1 Fish Stocks and Baseline Information

The Ugandan Fisheries Resources Research Institute (FIRRI) carried out quarterly surveys of fish abundance and species composition on behalf of AESNP during 2000. These surveys included ancillary studies into the importance of the upper Victoria Nile fishery to local residents, for both subsistence and commercial purposes.

At the time of the 2000 surveys, it was recommended by lenders that additional baseline information be collected prior to the reservoir being filled. Furthermore, the hydrology of Lake Victoria and the Victoria Nile has changed since 2000 due to the drop in water levels, and there may have been changes in fish stocks in response to these or other environmental perturbations. In order to further investigate these issues, BEL shall carry out baseline surveys of fish stocks in the area of the Victoria Nile that is potentially affected by the project. The scope for these surveys shall be similar to the quarterly surveys that were carried out on behalf of the previous project sponsor (FIRRI, 2001), so that comparison of the new and former data sets can be undertaken readily. Transect surveys shall be carried out at one study site upstream of the proposed dam location (Kalange-Makwanzi) and three study sites downstream of the proposed dam location (Buyala-Kikubamutwe, Matumu-Kirindi and Namasagali-Bunyamira). The scope of the surveys shall include, but not be limited to:

- Water quality – *in situ* measurements of Secchi depth, dissolved oxygen, temperature, conductivity and pH; laboratory measurements of dissolved and total nutrients, suspended solids, algal biomass (chlorophyll *a*) and composition, oil/grease;
- Aquatic macrophytes – identification to species level, where possible, and quantification using the DAFOR system;
- Micro-invertebrates using conical Nansen nets; sediment macro-invertebrates using a ponar grab and invertebrates associated with macrophytes using sweep nets. Particular attention shall be paid to potential disease vectors, including *Bulinus* and *Biomphalaria* snails, *Anopheles* mosquito larvae, and *Simulium* flies;
- A single dry-season survey of potential disease vector habitat between the Nalubaale-Kiira power stations and Dumbbell Island, including sweep net sampling for vectors, including those named above;
- Fish species, distribution and abundance – using graded gillnets and beach seine nets. Biometric measurements to include size, weight, gut contents, fecundity;

- Fish catch survey (catch per unit effort), based on known number of canoes, gear sizes and fishing methods; and,
- Appropriate statistical comparison between sites and sampling occasions (2000 to present) using ANOVA or other techniques.

The survey will include the March-May 2006 'long-wet' season. A report shall be prepared for this survey, comparing the data with the corresponding survey from 2000 (FIRRI 2000b). If the results of this survey indicate substantive changes in fish stocks and fisheries livelihoods (see also Section 2.2.2 below), three further quarterly surveys shall be carried out to correspond with the three further surveys carried out in 2000: nominally in August and November 2006, and February 2007.

Digital versions of these reports shall be made available to stakeholders on request, but it must be recognised that not all reports will be available prior to completion of the SEA documentation for the project. For those reports completed after submission of the SEA documentation, BEL will build the results of the reports into the project's Environmental Action Plan (EAP) and reporting, as required (see Section 2.4.3).

Provision of a fish pass (also now as a fish ladder) was a requirement of the Certificate of Approval for Environmental Impact Assessment issued to AESNP for the previous project design. However subsequent studies by FIRRI indicated that the omission of the fish pass will not have a significant impact and that a fish ladder is not justified. As a result NEMA withdrew the requirement for a fish pass (Scott, Wilson Piesold, 2004).

2.2.2 Fisheries Livelihoods

With respect to aquatic ecology and fisheries in the River Nile and the proposed Bujagali reservoir, BEL shall assess fishing practices and livelihoods. In doing so, BEL will review the surveys that were undertaken on behalf of the earlier project sponsor and assess any significant changes. BEL will also propose any interventions that may be needed in response to the anticipated effects of the hydropower development, by means of socio-economic surveys of fishers in the project-affected area. Where appropriate, these surveys will include interfaces with Beach Management Committees (BMCs), which are provided for by the Fish Act and the Fish (Beach Management) Rules, 2003. The scope of the surveys shall include, but not be limited to:

- Community livelihood patterns, including the relative importance of fisheries compared to other livelihoods;
- Perceptions towards hydropower development;
- Training needs; and,
- Infrastructure needs (new fishing equipment, fish landing sites, boats).

Where a need is indicated by the socio-economic surveys, BEL shall revise the fisheries-related aspects of the Community Development Action Plan (CDAP), proposed for the hydropower component of the project's SEA (see Section 2.4.5), as appropriate.

2.2.3 Vector-borne Diseases

With respect to vector-borne diseases, BEL, in addition to the disease vector survey outlined in Section 2.2.1, shall assess the potential for the Bujagali impoundment to increase or decrease the incidence of vector-borne diseases. In so doing, BEL shall review the vector-borne disease surveys that were undertaken on behalf of the earlier project sponsor, and assess any significant changes, and liaise with relevant government officials, including the Vector Control Units (VCUs) of the Ministry of Health. Where the project is anticipated to cause adverse or positive impacts, such as increasing or decreasing vector habitats, respectively, appropriate mitigation or enhancement measures shall be devised and included in the EAP.

2.2.4 Terrestrial Ecology

With respect to terrestrial ecology of the riverbanks and the River Nile islands in the project-affected area, BEL shall carry out field surveys at a level of detail similar to that undertaken for the previous project sponsor in 1998-2001. This will enable a comparison of the two data sets so that BEL can assess any significant changes to the ecological baseline conditions of the project-affected area. The scope of these surveys shall include, but not be limited to:

- Transect surveys of plant species at five sites: Kikubamutwe, Malindi, Naminya, Bujagali camp site, and Namizi;
- Visual observations for terrestrial animals at above sites;
- Spot observations and timed-species counts for birds at four sites: Kikubamutwe, Namizi, Bujagali Camp and Kyabirwa Islands;
- A terrestrial assessment of plant and animal species on Dumbbell and the larger islands at Bujagali Falls that will be fully or partially inundated; and,
- Assessment of value of affected habitats and species.

BEL shall incorporate appropriate measures for avoidance and mitigation of adverse effects to identified features into the SEA's EAP. Where appropriate, these measures will be integrated into planned, off-site mitigation, compensation and enhancement activities in the Mabira Forest Central Forest Reserve and/or the so-called Kalagala-Itanda Offset¹.

¹ As a compensation for the loss of the natural habitats at Bujagali Falls that would be inundated by the project reservoir, the GoU and IFC agreed in 2001 that the falls and natural habitats at the downstream Kalagala site would be protected in perpetuity and, where possible, enhanced.

An assessment of the impact of the project on the biophysical environment including the development of appropriate mitigation will be conducted. This will include for example an assessment of impacts on vegetation from the reservoir, impacts on water quality, risks of macrophyte development (water hyacinth) and impacts on future tourism developments. The SEA will also address the protection of the reservoirs banks and measures to reduce sedimentation in the reservoir (e.g., watershed management measures).

2.2.5 Construction-Related Issues

There are several issues associated with the construction of the Bujagali HPP that could potentially affect the biophysical and social environment, which BEL will assess. Examples of some of these issues are the mining of aggregate material required for the project, potential siltation of water bodies, the management of noise, dust and traffic issues associated with construction activities, a review of seismic vulnerability of the project, and an assessment of labour and health issues such as those resulting from an influx of people associated with construction camps. These issues will be assessed in detail by BEL so that the full scope of the proposed construction activities are understood and appropriate mitigation measures can be developed and built into the project EAP. Earlier work by the previous project sponsor and its engineering, procurement and construction (EPC) contractor on the identification and mitigation of these construction-related issues will also be reviewed.

2.3 Social Environment

2.3.1 Socio-economic Baseline Studies

BEL will undertake a socio-economic survey of the project-affected area at the hydropower site to characterize the socio-economic conditions and livelihoods of the people living in the eight project-affected communities. This will be done by reviewing the socio-economic baseline developed by the previous project sponsor around the proposed Bujagali hydropower site in late 1999 and early 2000 (ESG and WS Atkins, 2001a) and supplementing this information, where appropriate, with new survey data. BEL will also undertake a socio-economic and livelihood survey to monitor the current status of the previous Sponsor's resettlement activities (see details in Section 2.3.2, below). Information on the current status of public services in the project area will also be documented based on direct observations and interviews with local council representatives.

2.3.2 Resettlement and Compensation

Based on preliminary field observations and consultations with local leadership in project-affected villages and the Bujagali Implementation Unit (BIU), it appears that the previous project sponsor largely completed compensation and resettlement work

at the hydropower site before its departure. As part of the SEA, however, BEL will verify this general observation by preparing a detailed monitoring of the status of those compensation and resettlement activities with commitments made in the earlier Resettlement and Community Development Action Plan (RCDAP). Should this monitoring identify outstanding issues or concerns, a corrective plan will be prepared by BEL in consultation with potentially involved stakeholders for subsequent implementation.

The monitoring activities proposed would include, but not necessarily be limited to the following:

- At the resettlement site at Naminya;
 - Check visually the structural soundness of resettlement housing and the quality and durability of construction; and,
 - Assess resettlers' satisfaction against the following criteria;
 - o Site location and layout, house design, house construction;
 - o Agricultural plots (fertility, size, assistance);
 - o Public services (water, power, health and education);
 - o Livelihood restoration (are they better or worse off?); and,
 - o Check access of resettled people to ownership (actual delivery of title deeds) for the resettlement plots and houses.
- For the compensates;
 - Review and assess the compensation process and delivery of entitlements; and,
 - Review and assess compensation rates against the "full replacement value" requirements, and check whether those who were compensated for lost structures were able to rebuild similar buildings.
- Review livelihood restoration assistance and compare current livelihoods with those of the pre-compensation situation;
- Review the adequacy of the grievance mechanism process;
- Review the adequacy of vulnerable people support measures; and,
- Review the pending claims, and assess whether an amicable settlement is possible.

The monitoring shall be based on the following methods:

- Review all available monitoring reports of AESNP's that are maintained by BIU;
- Interview the BIU personnel in charge of monitoring resettlement and compensation;
- Interview local government representatives, particularly those at the LC3 and LC1 levels, in both Jinja and Mukono Districts;
- Visit resettlement site and assess physical resettlement infrastructure (both individual houses and public infrastructure); and,

- Conduct household interviews based on a questionnaire with the following sample² totaling about 200 households;
 - o All resettled households;
 - o 50 percent of the other physically displaced households; and,
 - o About 3 percent of the compensates.

This survey will be used to assist in establishing the socio-economic baseline for the project-affected communities at the Bujagali hydropower site and to check the status of livelihood restoration and related commitments made in the 2001 RCDAP.

2.3.3 Cultural Properties Management and Status

BEL will review the Cultural Properties management work undertaken by the previous project sponsor, assess the adequacy and completeness of that work, and determine what further work needs to be undertaken. At the hydropower site, detailed archaeological investigations have already been undertaken for the project-affected area, compensation has been paid for people's shrines (*amasabo*) in the area and appeasement ceremonies have been undertaken to enable the relocation of the Bujagali spirits. However, it is important to corroborate if people who live in the project-affected area believe that the Cultural Properties management work undertaken by the previous project sponsor is truly complete. Accordingly, BEL commits to detailed consultation with locally affected communities on their observations and opinions on this issue, with follow-up and a revised Cultural Properties Management Plan, as necessary.

2.3.4 Broad Community Support

Certain lenders to the Bujagali HPP have an expectation that a "broad community support" decision can be made on the project before they decide to participate in the financing of the project. According to IFC, as one example:

Broad Community Support is a collection of expressions by the affected communities, through individuals or their recognized representatives, in support of the project.

BEL commits to consultation with the lenders and other stakeholders, as appropriate; in order to provide the information it reasonably can to assist the lenders in their "broad community support" decision-making through the Bujagali HPP SEA process and documentation.

² The sample will be stratified by communities and otherwise randomly selected.
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2.3.5 Tourism

BEL will assess current tourism activities in the project-affected area and what impacts the Bujagali HPP may have on tourism. The scope of the proposed tourism impact assessment work is as follows, the results from which will be documented in the final SEA report and Tourism Action Plan, as appropriate:

- Consult with all appropriate central government and local government authorities and tourism operators and their association(s) to determine the present status of tourism in the proposed hydropower development area;
- Assess the potential impacts of the Bujagali HPP on tourism in the hydropower development area, including any effects on the white water rafting (WWR) industry;
- Advise on potential measures to mitigate the effects to WWR and other tourist amenities at the hydropower site and propose alternative tourist development scenarios and/or facilities that could be developed on or adjacent to the proposed reservoir. This will include an assessment of tourism opportunities that can be promoted and developed at the “Kalagala Offset” site downstream; and,
- Consult with tourism operators and their association(s) and local communities and their leadership (LC1, LC3, and LC5 levels) on tourism impact mitigation measures and alternative tourism development strategies and how they can be involved in delivering future tourism services (e.g., accommodation, activities).

2.3.6 Dam Safety

BEL will re-assess the Dam Safety review that was commissioned by AESNP in 2000, to include an assessment against current ICOLD and International Hydropower Association guidelines. The Dam Safety Review will be updated as required to comply with these guidelines, and will include a Dam Safety Panel, as well. The SEA will describe the findings of the assessment, and set out the proposed framework for ongoing dam safety review and implementation during construction and operation of the Bujagali hydropower facility.

2.4 Preparation of Plans to Disclose SEA Details and Address Impacts

For each of the biophysical and socio-economic remits of work for the Bujagali hydropower site, described above, the assessment of effects will need to be categorized into short-term vs. long-term effects, construction versus operation effects, irreversible versus mitigable effects, and project-specific versus potentially cumulative effects. BEL will undertake this exercise of impact identification and assessment such that appropriate environmental and social action plans can be developed to address these effects spatially and temporally. Each of the plans developed will include anticipated cash flow requirements, implementation schedules and monitoring/mitigation roles, responsibilities and requirements for capacity building, where necessary. At present the various action plans are envisioned as stand-alone documents with cross referencing as appropriate.

2.4.1 Public Consultation and Disclosure Plan (PCDP)

The development and implementation of a Public Consultation and Disclosure Plan (PCDP) is a WB/IFC requirement for a “Category A” project such as the Bujagali HPP. WBG/IFC requirements have traditionally included a consultation process with two successive phases:

- Once the ToRs are available in draft form and before they are finalized, to obtain stakeholders’ inputs on the ToRs themselves, and particularly to check that no issue of concern to stakeholders has been omitted in the SEA scope of work; and,
- Once when the draft SEA is available, and before it is finalized, to obtain stakeholders’ inputs on the SEA conclusions, and particularly on the mitigation and action plans (e.g., the EAP and Resettlement Action Plan).

Project sponsors are generally expected to provide relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted, including:

- A summary of the proposed project’s objectives, description, and potential impacts for the initial consultation; and,
- A summary of the SEA’s conclusions for consultation after the draft SEA report is prepared.

For the Bujagali HPP SEA, BEL will make the draft SEA report available at a public place accessible to project-affected groups and local NGOs. In addition, environmental information will be available through the World Bank InfoShop for a disclosure period of no less than 60 days (IFC) and 120 days (IDA) before Board dates.

Should the Bujagali HPP have ongoing resettlement issues, the appropriate Resettlement Action Plan (RAP) documentation will also be submitted for public consultation by BEL, in coordination with the SEA-related consultation effort.

For the Bujagali HPP SEA, BEL shall abide by the above-noted PCDP requirements and, in addition, shall include the following details in its PCDP:

- Brief introduction, including a short description of the Project;
- Review of the legal context related with public consultation (both in-country and international requirements) for the SEA;
- Review of previous public consultation and disclosure related to the project, including a summary of the issues discussed;
- Identification and description of stakeholders in the Project (affected and impacted villages – village leaders and the general population, relevant Government authorities at local, regional and federal level, civil society organizations, including NGOs, village leaders, fishermen, international stakeholders);
- Identification of key issues and concerns identified by stakeholders;
- Development of the community engagement strategy and action plan for the whole project life (development, construction, operation), including communication methods applicable to each identified target group, detailed scheduling of activities during the SEA phase, resources and implementation arrangements (personnel, community information centre, etc.);
- Development of the public disclosure strategy at local, regional, national, and international levels, including the use of a web site and other means of disseminating information;
- Development of a grievance management mechanism; and,
- Implementation details, responsibilities, and schedule.

Close liaison with local authorities (LC5, LC3 and LC1) will be maintained for the development and implementation of public consultation activities.

The PCDP will be developed early in the process, and will be submitted to NEMA so that any specific requirements of the Ugandan EIA regulations are included in the draft final version of the PCDP.

2.4.2 Management Program

A Management Program will be developed which will set out the framework by which the Environmental management activities set out in the Environmental Action Plan (see Section 2.4.3) will be implemented. This will consist of an organizational structure and a framework for associated operational policies, procedures and practices.

2.4.3 Environmental Action Plan (EAP)

As part of the Bujagali HPP SEA, BEL shall prepare an Environmental Action Plan (EAP), consistent with the requirements of NEMA, and with IFC's Performance Standard 1: Social & Environmental Assessment and Management System. This Action Plan will include measures to avoid, prevent, reduce, mitigate, remedy or compensate any adverse effects on the environment in relation to the construction and operation of the Bujagali HPP.

The EAP will include, but not be limited to, outlines for the following component plans:

- Traffic Management Plan;
- Dust Management Plan;
- Waste Management Plan;
- Staff Training Plan;
- Pollutant Spill Contingency Plan;
- Emergency Response Plan;
- Monitoring Plan;
- Reporting and Change Management Plan; and,
- Health & Safety Management Plan.

It is recognized that the EPC contractor to be retained by BEL, as the party that will be responsible for the majority of day-to-day implementation of the EAP, may wish to amend the EAPs or its component plans before or during their implementation. Hence, provisions for a Change Management Plan within the EAP will be included.

2.4.4 Social Action Plan (SAP)

BEL shall prepare a Social Action Plan (a sub-plan of the general project EAP), which will be developed to address mitigation of potentially negative social impacts associated with the project and enhancement of positive impacts. In practice; it may include, but is not limited to, the following issues:

- Non-discrimination and Equal Rights Issues, as applicable;
- Employment issues, including labour rights and applicable human resources policies and procedures, which will be consistent with IFC Performance Standard 2 (Labor and Working Conditions) and the various International Labour Organization Conventions cited therein;
- Workers' accommodation;
- Benefits accruing to local communities (e.g., catering and other activities);
- Local governance;
- Vulnerable groups (e.g., elderly and disabled) within affected communities;
- HIV/AIDS prevention and other health-related issues;
- Gender-related impacts;

- Impeded access; and,
- Monitoring and community liaison at construction and operation phases.

The Social Action Plan (SAP) will be based on the same general format as the Environmental Action Plan, described in Section 2.4.3, above.

2.4.5 Community Development Action Plan (CDAP)

BEL proposes to develop a Community Development Action Plan (CDAP) for the eight project-affected villages around the Bujagali HPP site. This CDAP will focus on economic development and poverty alleviation activities in these communities in such potential sectors as health, education, water supply, electricity provision and micro-finance. BEL will review the CDAP undertaken by the previous project sponsor, assess its adequacy and completeness in consultation with appropriate stakeholders, and determine what further work needs to be undertaken. BEL will also reflect upon the current socio-economic conditions of the project-affected villages and best practice in the development and implementation of CDAPs. For its CDAP, BEL will:

- Detail the economic development and poverty alleviation activities proposed, reflecting new realities at the hydropower site (such as those related with alternative tourism development and community-based fisheries management); and,
- Make a clear distinction between “quick-impact” activities, predominantly for the pre-construction and construction phase (i.e., activities which can deliver quick, meaningful developmental impacts in project-affected communities), and the longer term developmental activities to accompany the operational phase of the project, which will require further consultations with the beneficiary communities and better integration with the GoU’s developmental priorities for the area.

In addition, stakeholder involvement in planning and implementing community development activities will be a cornerstone of BEL’s CDAP approach, ultimately leading to the creation of a specific vehicle associating BEL and local stakeholders around common developmental objectives.

The CDAP will be a “stand-alone” document, and shall include the following sections:

- General socio-economic background of the area;
- Development planning for the area and development priorities;
- Definition and justification of the CDAP area;
- Consultation on development priorities with Government agencies, Local Councils and representatives of the interested communities;
- Quick-impact activities;
- Longer-term activities;

- Implementation mechanisms, including the potential establishment of a specific, multi-stakeholder vehicle; and,
- Implementation schedule.

2.4.6 Resettlement Corrective Plan (RCP)

As noted in Section 2.3.2, BEL shall prepare a Resettlement Corrective Plan if issues or concerns associated with earlier RCDAP commitments and WBG policies are identified. This will be based on the results of the monitoring studies being undertaken, and will be prepared on an as-required basis.

2.5 Transmission System

As noted above, a complementary ToR is provided for SEA studies proposed for the transmission system that will evacuate electricity from the Bujagali HPP and is an associated facility to it.

3.0 SEA Institutional Arrangements

3.1 Institutional Arrangements for the Preparation and Review of the SEA

As noted in Section 1.1, the Consultant will conduct the SEA process and prepare the SEA documentation for both the transmission system facilities and the HPP. The Consultant will also undertake the public consultation and disclosure activities for the project, as described in Section 2.4.1 of this ToR.

In Uganda, NEMA will coordinate the review of both the ToRs for the SEAs, as well as the SEAs themselves, soliciting review inputs in each case from “lead agency” reviewers, such as DWD, the National Forestry Authority and the Uganda Wildlife Authority. The Executive Director of NEMA has the discretion to require a public hearing for the project before a decision on whether to approve it is made and it is NEMA that, ultimately, has the authority to issue a Certificate of Approval for the project in Uganda.

For civil society and broader public consultation procedural requirements, there are the two points of public consultation and disclosure, as described in Section 2.4.1 of this ToR. Additional public engagement and consultation activities in the project-affected communities are also planned, as detailed in Chapter 2 of this ToR and in the accompanying PCDP.

A Panel of Experts will be established and receive advice from independent environmental and social specialists who would review the Bujagali project. This Panel of Experts will visit the project site and report on its observations and public and agency consultation activities and make recommendations on how the Bujagali project should proceed. These documents will be made publicly available. The Panel

of Experts will consult with a broad cross-section of stakeholders regarding the Bujagali project, reviewing environmental and social issues related to both the transmission and hydropower generation components of the project.

4.0 References

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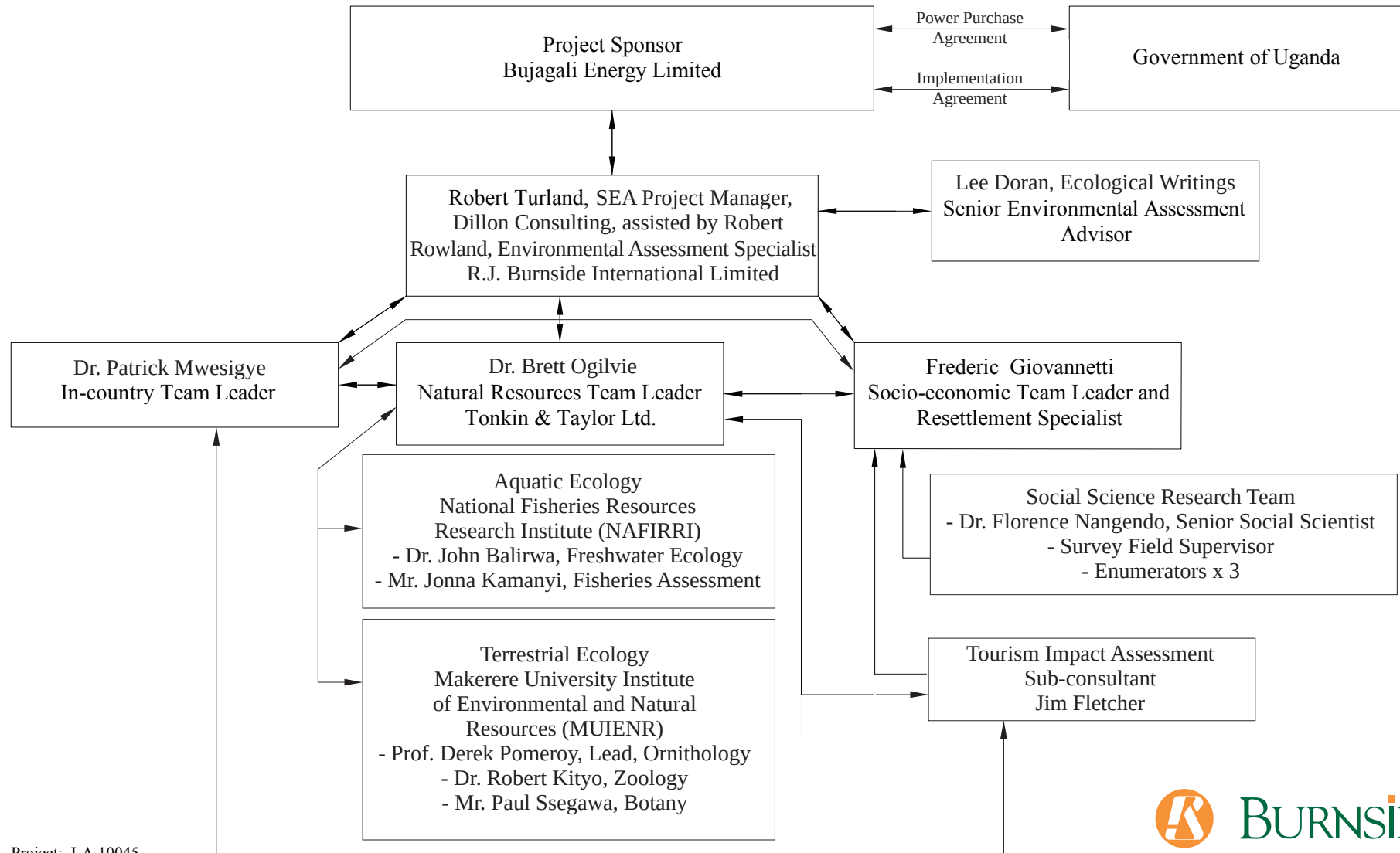
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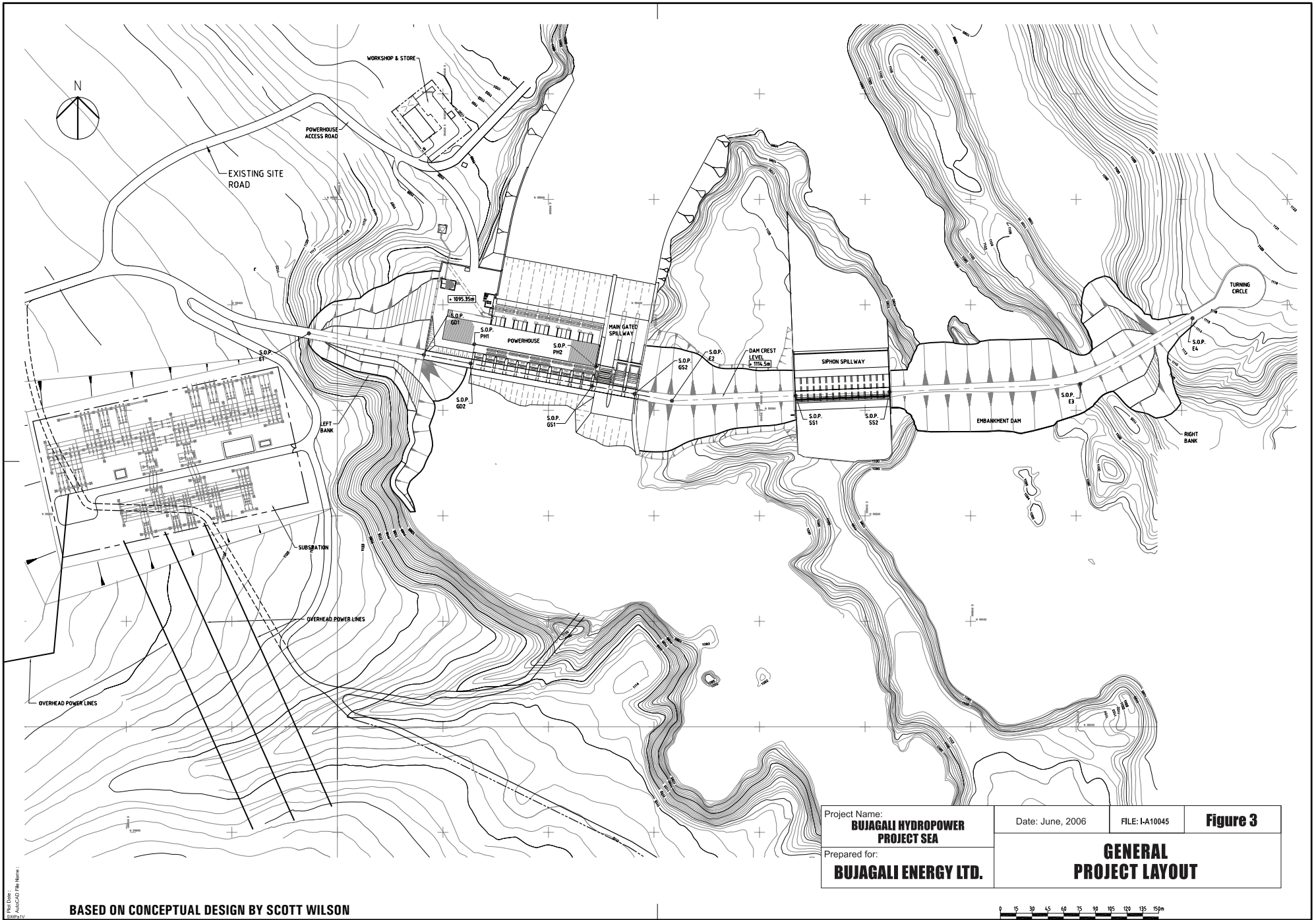


Figures

SEA TEAM REPORTING STRUCTURE BUJAGALI HYDROPOWER PROJECT, UGANDA

FIGURE 1





Project Name: BUJAGALI HYDROPOWER PROJECT SEA	Date: June, 2006	FILE: I-A10045	Figure 3
Prepared for: BUJAGALI ENERGY LTD.	GENERAL PROJECT LAYOUT		



BASED ON CONCEPTUAL DESIGN BY SCOTT WILSON

PLN 1000
AutoCAD File Name: 1
Drawing



Appendix A.2

SEA Team Registration



THE NATIONAL ENVIRONMENT
(Conduct and Certification of Environmental Practitioners)
REGULATIONS, 2003

ENVIRONMENTAL PRACTITIONERS' CERTIFICATE

Certificate No. CC / EIA / 034 / 06

M/S. Dr. Patrick Mwesigye

EICU P.O. BOX 20032 KAMPALA, TEL: 041-287938 / 0772 482057

Email:pmwesigye@ucpc.co.ug

was on the 10th day of April 20 06 certified as

An Environment Impact Assessor
to conduct environmental impact studies
in the following specialised areas

**Waste Management; Cleaner Production/Pollution Prevention;
Industrial Chemistry; Environmental Management.**

Conditions of Certification

- ❖ The practitioner shall practice as a **TEAM LEADER** of an
Environmental Impact Assessment team.

This Certificate expires on the 31st day of December 20 06

L. Binbo
Registrar

Ugheh
Chairman



**THE NATIONAL ENVIRONMENT
(Conduct and Certification of Environmental Practitioners)
REGULATIONS, 2003**

CERTIFIED FOREIGN ENVIRONMENTAL PRACTITIONERS

Certificate No. CC / F002 / 06

M/S. Mr. Robert S. Turland
DILLON CONSULTING CO., 5 CHERRY BLOSSOM ROAD, CAMBRIDGE,
ONTARIO, CANADA

was on the 03rd day of October 20 06 certified as

An Environment Impact Assessor

to conduct Environmental Impact Studies
in the following specialised areas

**Thermal and Hydro Power Projects, Electrical Transmission
Lines, Mines, Landfills; and Roads.**

Ugandan Registered Env. Practitioner Team Member(s)

Dr. Partick Mwesigye

Enviro and Industrial Consult (U) Ltd., P.O. Box 20032 Kampala

Tel: 256 - 77-2482057 Email: pmwesigye@ucpc.co.ug

Conditions of Certification

❖ Certificate is valid for the Bujagali Hydropower Project only.

This Certificate expires on the 3rd day of October 20 07

Libinbo
Registrar

Uganda
Chairman



THE NATIONAL ENVIRONMENT
(Conduct and Certification of Environmental Practitioners)
REGULATIONS, 2003

CERTIFIED FOREIGN ENVIRONMENTAL PRACTITIONERS

Certificate No. CC / F003 / 06

M/S. Mr. Brett Ogilvie

TONKIN & TAYLOR INTERNATIONAL, 19 MORGAN ST, NEWMARKET,
AUCKLAND, NEW ZEALAND

was on the 03rd day of October 20 06 certified as

An Environment Impact Assessor
to conduct Environmental Impact Studies
in the following specialised areas

Hydro Power Projects; and, Aquatic and Terrestrial Ecology

Ugandan Registered Env. Practitioner Team Member(s)

Dr. Partick Mwesigye

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Conditions of Certification

- ❖ Certificate is valid for the Bujagali Hydropower Project only.

This Certificate expires on the 3rd day of October 20 07


Registrar


Chairman



**THE NATIONAL ENVIRONMENT
(Conduct and Certification of Environmental Practitioners)
REGULATIONS, 2003**

CERTIFIED FOREIGN ENVIRONMENTAL PRACTITIONERS

Certificate No. CC / F001 / 06

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An Environment Impact Assessor

to conduct Environmental Impact Studies

in the following specialised areas

Resettlement and Rehabilitation, Environmental and Social

Impact Assessments; and, Water Supply and Community

Development.

Ugandan Registered Env. Practitioner Team Member(s)

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Registrar


Chairman