

**BUJAGALI HYDROPOWER & INTERCONNECTION PROJECTS
UGANDA**

PANEL OF ENVIRONMENTAL AND SOCIAL EXPERTS

1st REVIEW – FEBRUARY 2007

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SPECIAL NOTE:

This Panel of Experts report No 1 is presented in its entirety. BEL comments are not presented in this report.

Contents

1	INTRODUCTION.....	3
1.1	<i>SCOPE OF THE REVIEW</i>	3
1.2	<i>SCHEDULE OF THIS REVIEW.....</i>	3
1.3	<i>THIS REPORT</i>	3
1.4	<i>NOTICE</i>	4
2	SUMMARY – MAIN RECOMMENDATIONS.....	5
2.1	<i>OVERVIEW</i>	5
2.2	<i>SUMMARY OF THE 1ST REVIEW RECOMMENDATIONS.....</i>	5
3.0	DETAILED RECOMMENDATIONS - DISCUSSION	11
3.1	<i>IMPLEMENTATION PLANNING.....</i>	11
3.2	<i>RESETTLEMENT ORGANIZATIONAL STRUCTURE</i>	11
3.3	<i>RESETTLEMENT MONITORING AND EVALUATION</i>	11
3.4	<i>CONSULTATION.....</i>	12
3.5	<i>ECONOMIC RESTORATION – HYDRO RETROFIT AND INTERCONNECTION PROJECTS.....</i>	12
3.6	<i>COMPENSATION MONEY MANAGEMENT.....</i>	14
3.7	<i>ENTITLEMENT ELIGIBILITY</i>	15
3.8	<i>INTERCONNECTION COMPENSATION RATES.....</i>	15
3.9	<i>FIREWOOD.....</i>	15
3.10	<i>NEW RESETTLEMENT SITES.....</i>	15
3.11	<i>VULNERABLE PEOPLE</i>	16
3.12	<i>CULTURAL PROPERTIES</i>	16
3.13	<i>HEALTH & WELFARE</i>	16
3.14	<i>OPPORTUNISTIC INFLUX MANAGEMENT</i>	16
3.15	<i>CONSTRUCTION CAMPS & WORKFORCE MANAGEMENT.....</i>	17
3.16	<i>TOURISM EFFECTS.....</i>	17
3.17	<i>COMMUNITY DEVELOPMENT PLANNING & ORGANIZATION</i>	18
3.18	<i>GENDER.....</i>	19
4.0	ENVIRONMENTAL ISSUES.....	19
4.1	<i>SHORT EVALUATION OF SEA REPORT</i>	19
4.2	<i>MITIGATION MEASURES</i>	19
4.3	<i>ADDITIONAL ISSUES.....</i>	23
4.3.1	<i>Environmental Responsibilities.....</i>	23
4.3.2	<i>Environmental Mitigation and Monitoring Plan (EMMP).....</i>	23
4.3.3	<i>Water Quality Monitoring.....</i>	23
4.3.4	<i>Emergency Organization</i>	24
5.0	PANEL’S NEXT REVIEW	24
	ATTACHMENT 1: LIST OF MEETINGS HELD DURING 1ST SITE VISIT	25
	ATTACHMENT 2: CAMP & WORKFORCE MANAGEMENT – ISSUES FOR CONSIDERATION IN LOCATING AND PLANNING	27

1 INTRODUCTION

1.1 SCOPE OF THE REVIEW

This report presents findings and recommendations of the Panel of Social and Environmental Experts for the Bujagali Hydropower and Interconnection Projects. The Bujagali Hydropower Projects (“the Projects”) is a proposed 250 MW hydropower facility on the Victoria Nile in the Republic of Uganda. The Projects sponsor is Bujagali Energy Limited, a projects-specific partnership of SG Bujagali Holdings Ltd. (a wholly owned affiliate of Sithe Global Power, LLC) and IPS Limited (Kenya).

The Projects is closely associated with the Uganda Electricity Transmission Company Ltd.’s (UETCL) Bujagali Interconnect Projects, which is a proposed interconnection system from the Bujagali Hydropower Projects to the national electrical grid. The Bujagali Interconnection projects (IP) will be constructed, owned, and operated by UETCL.

BEL has applied to the International Finance Corporation (IFC) for external financing. BEL commits to comply with IFC’s environmental and social policies (available at www.ifc.org). These policies require that Category A projects *“that are highly risky, or contentious, or that involve serious and multidimensional environmental concerns, the projects sponsor should normally also engage an advisory panel⁴ of independent, internationally recognized environmental specialists to advise on all aspects of the projects relevant to the environmental assessment”*.

According to IFC’s environmental and social policies, such panels are expected to “advise the projects sponsor on the following aspects as appropriate: (a) the terms of reference for the environmental assessment; (b) key issues and methods for preparing the environmental assessment; (c) recommendations and findings of the environmental assessment; (d) implementation of the environmental assessment’s recommendations; (e) development of environmental management capacity; and (f) engineering matters, such as dam safety.”

BEL entered into contracts with Kerry Connor and Robert Zwahlen, Social and Environmental Experts to serve as the two members of the Panel of Environmental and Social Experts for the Projects (“the Panel”).

1.2 SCHEDULE OF THIS REVIEW

Panel visits are scheduled to take place a minimum of once per year. The first Panel visit took place in Uganda from February 4 to 10 2007. The Mission included:

- Review of SEA report and associated documents.
- Discussions with Projects staff (BEL personnel, PIU staff, BEL’s environmental and social consultants)
- Site visits (dam site, reservoir area, Kalagala offset site, resettlement villages, communities to be resettled, and transmission line corridor).
- Meetings with various stakeholders (see Annex 1).

1.3 THIS REPORT

This report includes this introduction, a summary table showing the main social and environmental issues identified by the Panel and recommendations for their management, and a discussion of issues and recommendations and comments on the SEA. This report reflects the Panel’s independent findings and recommendations. A draft version of this Report has been submitted to the Projects’ Sponsor for checks of factual accuracy and comments, which were independently assessed by the Panel and may have been included in the final version as the Panel deemed appropriate.

1.4 NOTICE

This report was prepared by the Panel for the use of Bujagali in support of Bujagali's own consideration of whether and how to proceed with the recommendations of this report. This report may not be relied upon by others. Unless specifically stated otherwise in this report, the information contained herein was provided to the Panel by Bujagali and others, and has not been independently verified. In addition, the Panel may have had to rely upon assumptions, especially as to future conditions and events. The Panel does not represent that any assumed conditions will come to pass.

The interviews and discussions conducted for this Report with projects staff, projects affected people, NGOs and other stakeholders were carried out on a confidential basis. It was not within the remit of the Panel to verify or substantiate the statements made by interviewees and, unless otherwise indicated, the Panel has taken no steps to verify or substantiate such statements. Due caution should therefore be attributed to all statements reported to have been made by interviewees. Accordingly, the Panel makes no representation as to the substance of reported 'perceptions' or 'beliefs' of interviewees and notes that hearsay evidence should not be treated as proof of any specific statement or concern expressed.

This report is integral and must be read in its entirety. Neither the Panel nor any person acting on its behalf assumes any liability to any party with respect to the use of or for damages resulting from the use of any information contained or opinions expressed in this report. This notice must accompany every copy of this report.

2 SUMMARY – MAIN RECOMMENDATIONS

2.1 OVERVIEW

The Panel agrees that the Projects' principles for management of environmental and social impacts are sound. The SEA adequately identifies impacts and proposes acceptable mitigation measures for environmental impacts. The APRAP and Transmission Line RAP adequately set out principles and a framework for retrofitting of the original and implementation of the remaining resettlement. The Panel recommends that priority now be given to preparation of more detailed implementation plans. In many cases, the Panel's recommendations are meant to highlight or advance strategies or tasks presented in the Projects' existing social and environmental plans. The Panel concludes that high priority needs to be given to the following tasks:

1. Preparation of the final implementation plans for transmission line resettlement and for environmental management (EMMP and other related plans dealing with environmental management, health and safety issues).
2. Development of an overall organizational structure and sub-structures for management of the implementation of social and environmental measures.
3. Assignment of appropriate personnel and definition of their responsibilities.
4. Implementation of the remaining resettlement measures for already resettled PAP, with emphasis on income restoration measures.

2.2 SUMMARY OF THE 1ST REVIEW RECOMMENDATIONS

The Table below shows the Panel's main recommendations for Environmental and Social. More details on recommendations are presented below the table.

The Table below characterizes recommendations as follows:

<u>Compliance:</u>	Actions that are critical to ensure compliance with commitments contained in the RAP, ESAP or World Bank Group policies
<u>Good Practice:</u>	Actions that help ensure that the social and environmental issues have been properly identified and that mitigation and management measures are well planned and implemented, and supported by effective monitoring and evaluation.

Table 1: Recommendations of the 1st review of the Social and Environmental Panel of Expert

Review Feb 07	#	Topic – Social Issues	Recommendation	Compliance issue or Good Practice	Timing
	a	EMMP (Environmental Mitigation and Monitoring Plan) and associated plans including Resettlement Action Plans	The EMMP and associated plans (corresponding in total to an Environmental Management Plan as required under OP 4.01, Annex A, Paragraph 3) need to be developed.	Compliance	Sufficient time prior to construction activities
	b	Resettlement Action Planning	Prepare detailed plans, with resource loaded schedules and responsibilities, for implementation of remaining inputs for dam resettlement/displacement and Interconnection Project relocation.	Compliance	Q 2-3 07
	c	Resettlement Organization Structure & Resources – Hydro & Interconnection	Complete resettlement structure, assigning sufficient staff with appropriate capacity to complete dam resettlement and undertake interconnection projects resettlement. This structure should include monitoring and evaluation processes and responses.	Compliance	Q 2/3 07
	d	Resettlement and CDP Monitoring & Evaluation	Initiate Outcome evaluation about six months after displacement occurs and continue about every six months until economic restoration measures should reasonably have restored income.	Good Practice	Q2 & onward
	e	Resettlement Consultation – Hydro and Interconnection Projects	Prepare rolling Consultation Plan for EMP, RAP, and CDP implementation, including acquisition of appropriate internal resources and clarification of roles of external parties.	Compliance	Q 2-3 07
	f	Hydro & Interconnection Physical Resettlement - Economic Restoration	The Hydro APRAP and Interconnection Project RAP provide good basic plans for economic restoration. These plans now can be translated into detailed tasks, with assigned responsibilities and resource loaded schedules, including GoU inputs, so that implementation can begin.	Compliance & Good Practice	Q2-4 07

Review Feb 07	#	Topic – Social Issues	Recommendation	Compliance issue or Good Practice	Timing
	g	Future compensation payments	Use lessons learned from monitoring to develop additional measures that support PAP in prudent and constructive compensation use.	Good Practice	Q2 07
	h	Resettlement – Hydro & Interconnection Projects Money Management	Provide more comprehensive money management instruction that specifically addresses relocatees' compensation spending and investment, and is delivered relatively close to the time compensation will be received. Tie the money management instruction more directly to economic restoration, such as use of compensation to purchase economic restoration inputs.	Good Practice	Q2 07 onward
	i	Entitlement Eligibility	According to Ugandan law, compensation is awarded to the "owner," thus to an individual, rather than on a household basis. Good practice, however, promotes resettlement by household. Both law and good practice can be reconciled to a reasonable extent by giving compensation on an individual basis, while using the household as the unit of entitlement and measurement.	Good Practice	Q2 07 onward
	j	Interconnection Compensation Rates	GoU has not evaluated area compensation rates for several years. BEL to continue working with district to ensure that rates are current.	Compliance	On-going
	k	Firewood	Resolve issue of PAP access to firewood from forest for domestic consumption. District Forest manager indicates PAP may do so, but PAP who gather wood have encountered problems (confiscation of axes, threats).	Good Practice	Q2
	l	New resettlement sites	Assess resettlement site needs and identify final sites in consultation with PAP.	Compliance	Q2-3 07
	m	Vulnerable People	The identification and evaluation of vulnerable people, as indicated in the APRAP, should commence as soon as possible for both dam resettlement and a sample of dam displaced persons.	Compliance	Q2-4 07

Review Feb 07	#	Topic – Social Issues	Recommendation	Compliance issue or Good Practice	Timing
	n	Cultural Properties	Finalize decision on interdenominational remembrance service for people buried in Nile river islands.	Compliance	Q2 - 07
	o	Health & Welfare	Team with local Health Department CCC program and Projects' Prime Contractor(s) to develop and implement a comprehensive Health Care and Practice Program for workforce and some health care provisions for local communities, such HIV/AIDS and other communicable disease prevention.	Good Practice	Sufficient time prior to construction
	p	Influx Management	Develop an influx minimization and management support program.	Good Practice	Q 2-4 07
	q	Construction Camps	Work with EPC to develop Construction Accommodation Plan that considers the Projects' social, cultural, economic and environmental context and characteristics of other country national workforce. (See Attachment 2).	Good Practice	Q 2-3 07
	r	Workforce Management	Work with EPC to prepare detailed workforce management plan, in collaboration with EPC/M, including Code of Conduct that minimizes adverse impact on local communities. Provide training at induction and regular follow ups, and rigorously monitor and respond to workforce adherence.	Good Practice	Q 2-3 07
	s	Tourism Effects	The Projects are providing constructive support to tourism companies affected by the loss of rapids. The Projects should consider helping bring other international investors into this effort.	Good Practice	Q 2 07– onward

Review Feb 07	#	Topic – Social Issues	Recommendation	Compliance issue or Good Practice	Timing
	t	Community Development Planning	<p>The Projects should determine –</p> <ul style="list-style-type: none"> ▪ Its long term goals and short, medium and long term objectives, based on its comparative advantage to deliver as a private sector entity. ▪ How the CDP will be further developed into a phased and detailed Execution Plan. ▪ Who will oversee development and implementation of the CDP effort. ▪ The organizational structure for implementing the plan. 	Good Practice	Q3-4 07
	u	Community Development - Gender	<p>Conduct a business assessment to determine the most appropriate ways to support business development (considering a focus on women), as well as identify models that have worked in the area.</p> <p>The Projects should also consider models that capitalize on the presence of an international investment (the Projects and downstream industries) as initial markets, as opposed to a low level community focus.</p>	Good Practice	Q 3 07 onward

Review Feb 07	#	Topic – Environmental Issues	Recommendation	Compliance issue or Good Practice	Timing
	a	Water quality, suspended solids	Table 2, 3.2.1: daily or online monitoring of suspended solids	Good Practice	Q2 07
	b	Water quality in reservoir	Table 2, 3.2.3: timely pre-impoundment clearing of reservoir area.	Good Practice	before impoundment
	c	Effects on traffic and roads	Table 2, 6.2: define radius for assessment of road conditions.	Good Practice	before starting construction works

Review Feb 07	#	Topic – Environmental Issues	Recommendation	Compliance issue or Good Practice	Timing
	d	Loss of habitat	Table 2, 7.1: prepare compensation plan for Mabira CFR (TL impact).	Compliance	before starting TL construction
	e	HIV prevention	Table 2, 10.1: consider "closed camp" solution for worker's camp (see also Sections 3.13 and 3.15 of this report)	Good Practice	Q2 07
	f	Malaria risk	Table 2, 10.2: provide treated bednets.	Good Practice	at start of construction work
	g	Vector borne diseases	Table 2, 10.3: monitor and eliminate, if required, breeding places for disease vectors.	Good Practice	Throughout construction period
	h	Environmental contamination with oil	Table 2, 11.2.2: include contamination prevention measures in Action Plan	Compliance	Q2 07
	i	Health of staff	Table 2, 12.1.2: health infrastructure and emergency plan	Compliance	before start of construction
	j	Allocation of project benefits	Table 2, 14.1: Employment opportunities for local inhabitants: commitment from contractor	Compliance	Tendering of works
	k	Environmental responsibilities	Clarify environmental responsibilities of Sponsor and Contractor	Good Practice	Q2 07
	l	Water quality monitoring	Specify river water quality monitoring program	Good Practice	Q2 07
	m	Emergency organisaton	Specify external organisations from which the project might require support in case of emergencies (fire brigades, ambulance service, referral hospital).	Good Practice	Q2 07

3.0 DETAILED RECOMMENDATIONS - DISCUSSION

3.1 IMPLEMENTATION PLANNING

Acceptable principles, frameworks, strategies, and plans for some aspects of environmental and social management have been prepared. The Projects now should move forward with preparation of more detailed “action” or implementation plans, with particular attention to resource loaded schedules and assessment the capacity of internal resources and the capacity and intent of external resources to implement management plans.

The existing resettlement plans consist of an analysis of the original Hydro Power RAP (APRAP) and completed implementation measures and a resettlement framework for the Interconnection Projects resettlement. These clearly establish resettlement principles, measures, sequencing, and cost estimates as a sound basis for a comprehensive resettlement Execution Plan comprising organizational structures and responsibilities, human resources and capacity building, specific schedules, and the “final” costs necessary to complete Hydro and Interconnection Projects resettlement.

Recommendations:

- a. Prepare detailed implementation plans for the EMMP and all associated social and environmental management measures
- b. Prepare detailed implementation plan addressing the remaining inputs for dam resettlement/displacement and resettlement associated with the Interconnection Projects resettlement/displacement.

3.2 RESETTLEMENT ORGANIZATIONAL STRUCTURE

The Projects has not yet prepared a detailed organizational structure for implementation of future resettlement (physical and economic displacement) and retrofitting of previous resettlement. At the moment, existing staff are unclear about their future responsibilities. Negotiations are on-going regarding future staff assignments. Conclusion of a workable organizational structure, with staff assignments and assessment of staff capacity, will be critical to successful implementation and, thus, needs to be completed as accomplished in the very near future.

Recommendations:

- c. Complete resettlement structure, assigning sufficient staff with appropriate capacity to complete dam resettlement and undertake interconnection projects resettlement. This structure should include monitoring and evaluation processes and responses. It should also clarify roles of external agencies (GoU and private entities) that will assist in resettlement measures. Include these in overall organizational and reporting structure.
- d. Clarify roles of external agencies (GoU and private) that will assist in resettlement measures. Include these in overall organizational structure
- e. A general community monitoring evaluation, using a sample group, should monitor and evaluate potential social and welfare impacts of projects related factors such as in-migration and presence of external workers.

3.3 RESETTLEMENT MONITORING AND EVALUATION

Successful resettlement outcomes depend a great deal on an effective monitoring and evaluation program that signifies when a program needs to be changed or adapted. A Monitoring and Evaluation Plan was initiated for Hydro Projects relocatees under the Projects’ former owners. Since the departure of AES, BIU has been able to undertake only minimal resettlement monitoring. The evaluation of Hydro Projects resettlement and the RAP for the Interconnection Projects resettlement propose an indicative M&E approach, and this should be detailed, formalized and commenced quickly.

The Witness NGO (Interaid Committee) may need some support in understanding IFC social policies. In addition, the Committee appears to be or wish to be more involved in resettlement activities, which could affect its position as an *independent* evaluator.

Several Government agencies plan to monitor the resettlement and environmental management measures. The monitoring processes they will use and the issues on which they will focus need clarification. Assessment of the evaluation plan and discussions with PAP and the Witness NGO indicate the need for some additional considerations. These are listed below.

Recommendations:

- f. Outcome evaluation should begin about six months after displacement occurs and continue about every six months until economic restoration measures should reasonably have restored income. It is important that outcome evaluation be done in time to identify and improve program weaknesses before they become serious problems.
- g. At the end of the evaluation period, the external audit will determine if measures were (i) well conceived and (ii) successful to the extent that they were well conceived and made easily available. A basic TOR for this audit should be developed in the next six months.
- h. The outcome indicator list in the RCDAP is indicative. Some additional indicators might include the number and type of businesses PAP develop, the number and length of time people are employed in non-projects jobs, and purchase of “luxury” items.
- i. The Projects should clarify the roles of the Department of Environment and of UETCL, and other government agencies which will monitor the projects, and should develop information sharing protocols. UETCL monitoring, for example, is likely to focus on typical government concerns such as valuation and compensation and infrastructure, thus cannot be counted on to provide information on efficacy of economic restoration measures.
- j. The Projects should make sure that the Interaid Committee has a good understanding of IFC resettlement policies. In addition, the Committee should maintain objectivity by focusing on resettlement evaluation, rather than on undertaking other resettlement activities.
- k. A general community monitoring evaluation, using a sample group, should monitor and evaluate potential social and welfare impacts of projects related factors such as in-migration and presence of external workers.

3.4 CONSULTATION

Considerable consultation with PAP, both formal and informal, was done in preparation for the original Hydro resettlement, and some consultation, mainly informal, has continued. The RAP for the Interconnection resettlement, as well as discussions with Projects staff, indicate consultation on compensation, entitlements, and resettlement sites will be done. The Panel did not see a well defined consultation program for PAP or for local communities in general, and it is unclear who will prepare the consultation plan.

Recommendations:

- 1. Clarify responsibility for preparation of resettlement (including host communities) and other local community consultation (for example, for influx and construction related issues). Clarify responsibility for implementation of the consultation plan, and assess and address any issues of the capacity of those responsible to do so effectively.
Prepare Consultation Plan, including consultation methodologies, assigned staff responsibilities, capacity assessment and measures to upskill as necessary, schedule, budget, and monitoring plan. The EIA consultants can assist Projects staff who will implement the consultation to prepare the Plan.

3.5 ECONOMIC RESTORATION – HYDRO RETROFIT AND INTERCONNECTION PROJECTS

Economic restoration tends to be the most demanding aspect of resettlement. Past relocatees from both the hydro projects and the Kwanda substation identify a number of factors that have negatively affected their income, for example, lack of training, insufficient money management assistance, less fertile land, distance from fishing sites, and loss of commercial tree crops. The Projects should reassess future economic restoration

plans in the light of lessons learned and today's realities (such as Hydro PAP who took compensation and left the area), and should consider some forms of infrastructure as components of economic restoration.

The APRAP and Interconnection Project RAP propose a workable strategy and well developed approach. These RAPs now can be translated into detailed implementation plans, with resource loaded schedules.

Some of the recommendations from the RAPs are included in this list to underscore their importance, while other recommendations are suggested by the Panel.

Recommendations:

f. Hydro Retrofit:

The Projects should make a demonstrable effort to locate and evaluate the livelihood conditions of a reasonable sample of PAP who chose the compensation option. The relatively long period since displacement will make this a delicate exercise because it will be hard to control for intervening variables. This very circumstance, however, increases the effort's importance as additional time will further obscure the relationship between resettlement and PAP conditions. The conditions of sample PAP will determine the Projects' response. In the event that a large proportion of sample PAP are in poor condition, the Projects will need to assess and address causes, and may need to expand the sample. Finding these PAP may be facilitated by reorganizing the database by household, though individuals in the database have a household number as well.

g. Economic Restoration Measures – Hydro Retrofit & Interconnection PAP

Agriculture:

- Training and shift to commercial crops by providing tree seedlings. Investigate potential of inputs from the District Seedling Program.
- Understand more fully why production intensity was not successful with hydro PAP in order to implement more effective measures. Adapt program.
- Investigate potential for agricultural "value added" program.

Fishing:

- Provide new equipment & landing sites.
- Develop role of associations to increase production by sharing of equipment, as well as potential to eliminate "middle men."
- Access to old fishing sites: consider safety and security issues in granting of access.
- Understand the "track record" and experience of the Fisheries Research Institute.
- Investigate potential to work with international or other national fisheries projects.

Business Development:

- Develop and implement a special business development program including market assessment, on-going training/follow up, credit facilities, partners, etc.
- Identify goods and services PAP and other local people can provide to projects construction and operations.
- Design training program specific to businesses that will be developed, and include business management, as well as technical training. Initial training by ACDI VOCA was too general and "one-off."
- Discuss potential for support from IFC Africa SME facility and/or consider advice from SME/supplier development expert.
- Clarify and formalize role of African Development Foundation.
- Investigate micro-credit facility, especially for female PAP (Women's Collaborative Cooperative approach).

Employment:

- Develop and implement local worker program in collaboration with the EPC and its training manager. Program should give special emphasis to PAP. It should be built on a gap analysis of existing capacity/experience (of PAP and others) versus projects construction and operations needs, as well as other employment opportunities in the area.
- Specific types and numbers of jobs, for both PAP and other local people, can be estimated now as the basis for the gap

analysis. This will allow a training program to be targeted to specific job skills – important because training for “general” skills is rarely successful.

- Include “work ethic” and workplace safety as part of the program, as few people in the area have worked in regimented environments.
- Assess capacity of local (government or private) technical/vocational training agencies. The Projects may need to upgrade or provide external theory training. Develop on-the-job training and mentoring processes.

Infrastructure examples:

Water: Ensure that all pumps are working and that each settlement has assigned people trained to maintain them.

Schools:

- Meet commitment to upgrade Naminya R/C primary school and/or community kindergarten (which is functioning as a primary school).
- Naminya Community School - if this school is to serve as a primary school, ensure that it is certified and has qualified teachers.
- Provide accommodation for teachers.
- Assess & resolve staffing capacity (numbers and skill levels).

Health Care Facilities

- Staff accommodation
- Staff capacity assessment (numbers and skill levels)

Power: For settlements without power, the Projects should assess PAP ability to pay for power, and determine if resettlement sites can be covered by the Rural Electricity Program.

Land Titles: The Projects should continue to promote issuance of remaining land titles (Nansana and three cases in Naminya)

3.6 COMPENSATION MONEY MANAGEMENT

The majority of PAP have no or little experience with relatively large amounts of cash. PAP groups highlighted the need for a more substantial money management program, stating that the counseling they received inadequately addressed their need and was too early. Women particularly mentioned the need for a more focused program, partly because the men tended to spend their own and the women’s money rapidly and unwisely. Orphans also need financial protection from “guardians” who are assigned by community committees.

Recommendations:

h. Comprehensive money management

- Provide more comprehensive money management instruction that specifically addresses relocatees’ compensation spending and investment, and is delivered relatively close to the time compensation will be received. Tie the money management instruction more directly to economic restoration, such as use of compensation to purchase economic restoration inputs.
- Use PAP who have experienced adverse impact from unwisely spent compensation to raise awareness among future PAP groups.

i. Compensation Measures

- Compensation should be given in incremental payments, to the greatest extent feasible, especially to certain groups of people who are more vulnerable to other people taking advantage, such as orphans, some women, elderly. In some respects, all people receiving compensation are vulnerable.
- Consider organizing a program with a local bank so that compensation payments are deposited in accounts, thereby offering additional protection. The bank would also offer banking training to PAP who have not had accounts.

3.7 ENTITLEMENT ELIGIBILITY

According to Ugandan law, compensation is awarded to the “owner,” thus to an individual, rather than on a household basis. Good practice, however, promotes resettlement by household. Both law and good practice can be reconciled to a reasonable extent by giving compensation on an individual basis, while using the household as the unit of entitlement and measurement.

Recommendations:

- j. Consider employing a “package” approach to eligibility, wherein an amount of money is allotted for income restoration for each household based on pre-Projects approximate income. This allows households with two or more adult members to engage in different livelihood activities, and is particularly attractive where males and females have distinctive traditional roles. This approach will also facilitate monitoring and evaluation of household income and standard of living.

3.8 INTERCONNECTION COMPENSATION RATES

Compensation rates in Uganda are meant to be re-evaluated each year but re-evaluation has not occurred in several years.

Recommendations:

- k. BEL should continue to encourage the District Government(s) to ensure that rates are current.

3.9 FIREWOOD

PAP in the hydro and Kawanda resettlement villages indicate that they have been prohibited from taking firewood for domestic use (confiscation of axes, threats, etc.). The District Forestry Director informed the Panel that PAP may access firewood from the forests as long as the wood is used for domestic consumption.

Recommendations:

- l. Resolve issue of PAP access to firewood from forest for domestic consumption. Encourage or carry out fuel wood plantation (strips along roads, hedges, agroforestry practices, etc.) within the resettlement area itself in order to reduce time requirement for fuel wood collection.
- m. Encourage or carry out fuel wood plantation (strips along roads, hedges, agroforestry practices, etc.) within the resettlement area itself in order to reduce time requirement for fuel wood collection.

3.10 NEW RESETTLEMENT SITES

The Projects has identified potential resettlement sites for people displaced by the transmission line and substation near Kampala. The Projects encourages the resettlement option, as did the Hydro resettlement, though not as successfully as hoped. PAP on the east side of the river indicated they did not take the resettlement option for a number of reasons, including only one house style available, cultural differences between west and east side inhabitants, and site layout.

Recommendations:

- n. Consult PAP about -
 - o site location and layout, and consider sites PAP may find themselves.
 - o Consider offering options of dwelling types.
 - o Support Resettlement site planning by doing a targeted assessment of PAP who may select resettlement.

3.11 VULNERABLE PEOPLE

The hydro RAP defined vulnerable people and proposed support measures. PAP consulted and the APRAP indicate that these measures have not yet been implemented.

Recommendations:

- o. Expedite evaluation of the conditions of vulnerable people for both dam resettlement and sample of dam displaced persons. Consider especially orphan heads of household (whose money may have been taken by “guardians”) and women whose compensation may have been used unwisely by males. Prepare vulnerable people retrofit measures for already resettled PAP and implement measures as defined in the Interconnection RAP.

3.12 CULTURAL PROPERTIES

The original social management measures included an interdenominational remembrance service would be held for people buried in Nile river islands. This service has not been held. BIU staff indicate that there is only one person claiming to have relatives buried on one of the islands, and this person has no evidence of these graves.

Recommendations:

- p. Reach a defensible position on the holding of an interdenominational remembrance service for graves on river islands.

3.13 HEALTH & WELFARE

PAP (both female and male) in all villages visited indicate that certain health and welfare issues have arisen that the Projects has not yet addressed. These include an increase in HIV/AIDs and in fly and mosquito born diseases. PAP believe that the increased incidence of HIV/AIDs is caused by males using compensation money to visit prostitutes or promote relationships with numerous women. PAP in Namizi (on the east bank) believe that the increase in mosquito and fly born diseases has occurred because their old land is neither used nor cleared.

Recommendations:

- q. The Projects should seek outside assistance and team with local Health Department CCC program to develop and implement a comprehensive Projects HIV/AIDs program.
 - o Use PAP who already had negative experiences to raise awareness of future PAP to the dangers of spending compensation money “rashly”.
 - o Clear acquired land promptly.
 - o Initiate health monitoring.

See Camp and Workforce management section for additional measures.

3.14 OPPORTUNISTIC INFLUX MANAGEMENT

People in the Projects area believe that the Projects has already attracted a sizeable increase in population. There has not been a scientific survey, but a sizeable influx is inevitable given the lack of employment and income opportunities in Uganda. Managing population movements is the responsibility of the Government, but given the economic fragility and potential health and security issues, the Projects should develop its own Influx Management Support Program (IMSP).

Recommendations:

- r. The Projects should develop an influx management support program and align with the GoU and prime contractor(s) on responsibilities. Since most influx occurs at the construction phase, the program should have three components:
 - o Prevention – measures such as hiring away from projects area, clear information about projects employment opportunities, continuous monitoring, clear division of responsibilities between projects and government.
 - o Construction Workforce Management (see CWM below).
 - o Community Support – provide measures to help offset influx impacts, such as employment and income opportunities to meet rising costs, intense training and monitoring of all Projects staff who interact with communities, complaint mechanisms, and social and physical infrastructure that respond to increased population.

3.15 CONSTRUCTION CAMPS & WORKFORCE MANAGEMENT

The Projects is considering a number of approaches to construction worker accommodation, including camps on and off site and accommodation within communities. The potential for adverse impacts to the community and to the projects need to be considered.

Recommendations:

- s. Prepare a detailed workforce management plan, in collaboration with EPC/M(s), including Code of Conduct that minimizes adverse impact on local communities. Provide training at induction and regular follow ups, and rigorously monitor and respond to workforce adherence.
- t. To avoid negative social and health impacts, camps for external workers should be located away from local communities, especially scattered communities away from Jinja.
 - o Seriously consider “closed” camps, with provision of leisure facilities on site.
 - o Provide benefits to local communities through local procurement of goods and services for the camps to the extent feasible, as part of the economic restoration and local business development program.
 - o Prepare and implement monitoring and evaluation plan in conjunction with local authorities.
 - o Develop easily accessible complaint procedure addressing direct and indirect issues that may arise from presence of external workers.

3.16 TOURISM EFFECTS

Elimination of several rapids in principle causes a significant adverse impact. The projects requested the four rapids tourism services to submit business proposals. Two of the four facilities have submitted workable plans that will promote economic recovery and may result in higher end tourism, with an accompanying increase in revenue and in employment of local people. One of the four is very small, and may go out of business. Its few staff are unlikely to have a problem securing new employment, especially with the expansion of the larger tourism companies. The fourth facility is associated with a large tourism company. It has not responded to the Projects, probably because its owner is in negotiation with the Government concerning other land related issues.

Some casual workers (musicians, performers of various kinds) will lose their current “place of business.” The Projects will include them in the economic restoration program. Moreover, they can easily relocate their performances to new tourism locations.

Recommendations:

- u. The Projects should -
 - Investigate possibility of IFC involvement in financing portions of the proposals of the two main facilities (for example, the chimpanzee projects).
 - Continue and document efforts to make support available to the two facilities that have not yet responded.

3.17 COMMUNITY DEVELOPMENT PLANNING & ORGANIZATION

The Projects have completed Community Development frameworks that represent the basis for final detailed planning. The Panel recommends that the Projects now establish the long term *goals* of the CDPs, as well as the specific objectives of its short and medium term phases. In determining the CDP's long term goals, the Projects needs to consider its role and select interventions it, as a private sector enterprise, can best deliver. In most cases, this private sector comparative advantage lies in providing business and employment opportunities, as well as raising local people's capacity to take advantage of these opportunities. Programs initially can be tied to the Projects' employment and procurement needs, though should also consider other opportunities that exist or will exist in the area.

The emphasis on employment and income opportunities does not disqualify all forms of social and physical infrastructure, but it does require that the projects' contributions promote *independence* rather than create dependence. Education and health care, and roads and transport, for example, are important to people's capacity to work or sell their goods and services. At the same time, it should not be the Projects' responsibility to maintain these facilities. Therefore, a sustainable plan to provide infrastructure needs to be in partnership with Government, with the communities themselves, and with potential partners (such as other companies, international or national development agencies, NGOs).

Recommendations:

- v. The Projects should determine the following planning tasks:
 - Responsibility and timeframe for further development of the CDPs into detailed execution plans.
 - Resources and organizational structure (both internal and external) for phase 1 CDP implementation.
- w. The Projects should develop a phased strategy and goals for:
 - short, medium and long term CDPs, based on its comparative advantage to deliver as a private sector entity.
 - should devise an overall strategy for three phases, including a rolling planning mechanism that considers lessons learned and changing economic and social conditions.
- x. Phasing considerations:
 - **Short term** (next 2-3 years) – such as construction employment and goods/service supply, commercial agriculture. These can be similar to PAP economic restoration programs, but extended to community beyond PAP.
 - **Medium term** – continue focus on RAP economic restoration and economic opportunities for communities. This may include education and health, as long as these efforts support the overall goals and objectives of the CDP.
 - **Long Term** – to be determined during medium term.

3.18 GENDER

Women indicate they are interested in business development, and there is evidence that the area's women are more responsible than men are in programs such as micro-credit.

Recommendation:

A business assessment should be done to determine the most appropriate ways to support business development, as well as to identify models that have worked in the country or region. The Projects should also consider models that capitalize on the presence of an international investment (the Projects and downstream industries) as initial markets, as opposed to a low level community focus.

4.0 ENVIRONMENTAL ISSUES

4.1 SHORT EVALUATION OF SEA REPORT

Short comments on the EIA were made earlier (dated December 13, 2006), and this does not need to be repeated here. The main conclusions were:

- All relevant topics were addressed adequately in the SEA.
- The impacts seem to have been identified correctly, no missing issues.
- The mitigation measures mentioned in the Report seem to be adequate and suitable for compensating the impacts, where this is required.

The site visit carried out in the beginning of February 2007, along with the meetings held at that occasion confirmed this impression. For these reasons, it does not seem required here to address specific points of the EIA. What seems more appropriate at this point in time is to discuss a few points which must be addressed now. This concerns mainly the EMP and the identified mitigation measures.

4.2 MITIGATION MEASURES

The important mitigation measures identified in the SEA Report are listed in Table 7.15 of the report, together with observations on monitoring and follow-up. This Table is used as a basis for the following Table 2, for commenting on specific measures. The SEA Table is not reproduced in total, and the measures ("issues") are listed below in the sequence given in the Report. One column with numbering was added (no numbers provided in the SEA Report); these numbers, together with the (often abbreviated) "issues" should make it easy to find the corresponding mitigation measure in the SEA Report.

Table 2: Comments on mitigation measures

No.	Issue	Observation
1	Resettlement and Land Compensation	
1.1	Physical dislocation and land acquisition	Resettlement issue, already commented above
2	Effects on Land	
2.1	Loss of land, including agricultural land	no comment

No.	Issue	Observation
2.2	Loss of terrestrial habitat	Environmentally adequate measure (enrichment planting on remaining islands and in riparian strip above FSL). Has compensation for this (loss of land for being used for agriculture) already been made along with the resettlement? Any additional need for compensation?
2.3	Disturbance of land and borrow areas	Landscaping of quarry. Same questions as to 2.2.
3	Effects on Water	
3.1	Hydrology and Hydrogeology	
3.1.1	Decrease of d/s flow during reservoir filling	Adequate, since expected effect will be minor given the small reservoir with limited storage capacity (less than on day).
3.1.2	Water level rising in wells and pits	no comment
3.2	Water quality	
3.2.1	Suspended solids from coffer dam construction	Monitor Suspended Solids daily (or real-time turbidity monitoring once a relationship between turbidity and SS has been established for the site).
3.2.2	Erosion due to fluctuating water level during operation	no comment
3.2.3	Water quality in reservoir, eutrophication	Conclusion is plausible. Necessity for carefully planning and supervising pre-impoundment clearing (timing: not too early to prevent excessive regrowth; not only removal of valuable timber, but of soft biomass; prevention of logging above FSL requiring careful marking of FSL on the ground). Not on the critical path for the projects.
3.2.4	Public access to drinking water	no comment
3.2.5	Public access to river	Is this restricted to the construction phase? what happens afterwards?
3.3	Aquatic ecology and fishery	
3.3.1	Access to fish landing sites	no comment
3.3.2	Deleterious effects on fish population	Fisheries survey foreseen: pre-impoundment monitoring and survey in post-construction phase (i.e. after reservoir impoundment).
3.3.3	Damage to aquatic organisms	no comment
3.3.4	Change of available fish habitat	no comment
4	Effects on Air	
4.1	Dust	Included in EMMP.
5	Effects on Noise	
5.1	Nuisance noise	Implementation of noise management measures "as specified in the EPC Contractor's Action Plan": this plan still needs to be established. Reporting: to whom?
5.2	Blasting noise	Part of the plan (see above).
6	Effects on Traffic and Roads	
6.1	Road capacity and safety	Traffic Management Plan: will be prepared.
6.2	Deterioration of roads	Has the radius for such a measure been defined? Do the TOR for the EPC Contractor include all these measures and conditions?
6.3	Disruption of traffic	as above
7	Effects on Managed and Protected Areas	

No.	Issue	Observation
7.1	Loss of habitat (Jinja Wildlife Sanctuary)	Enhancement planting: related to measure. Kalagala site is an extremely important mitigation measure, must be set aside "for good". (This is obviously not entirely in the hands of BEL). Mabira CFR (compensation for TL impact): needs to be defined in more detail.
8	Effects on Tourism, Rafting and Aesthetics	
8.1	Inundation of Bujagali Falls and WWR route	no comment
8.2	Aesthetic change of river	no comment
9	Effects on Cultural Property	
9.1	Inundation of HH graves and amasabo	Resettlement issue, assessment continuing
9.2	Inundation of dwelling sites	Resettlement issue
9.3	Inundation of Bujagali rapids: Relocation of spirits.	Resettlement issue, already commented above
10	Impacts on Public Health	
10.1	HIV/AIDS and other sexual transmitted diseases	Potentially very important issue. If especially the question of work force accommodation is not solved properly, the expectation that "the projects will not have a significant effect in this respect" might not be fulfilled. Education program (including distribution of condoms) is important, but not sufficient. See comments provided in Sections 3.13 and 3.15 ("closed camp" solution).
10.2	Malaria risk	The provided bed nets should be treated. Malaria prevention is essential, but treatment of cases is just as important.
10.3	Vector born parasitic diseases	Risk during construction period: mosquito breeding places should be identified and if required eliminated Risk during operation: Water hyacinth (<i>Eichhornia crassipes</i>) and other floating weeds will be retained by the dam and not just washed down. There is a risk of forming extensive mats of these plants, which could form suitable habitat for snails which are intermediate hosts of schistosomiasis. In the case of the formation of such floating mats, measures would have to be taken (propagation of weevil introduced for destroying water hyacinths).
11	General Construction Related Issues	
11.1	Public and worker health and safety	
11.1.1	Adherence to labour standards	It is assumed that the required safety equipment (helmets, hearing protection where required, etc.) will be provided, and that the use of this equipment will be enforced.
11.1.2	Public safety issues	no comment
11.1.3	Work related injury or health effects	See observation to 11.1.1 What is the content of the Monthly Environmental Inspection Report? Does it cover Health and Safety issues?
11.1.4	Drinking water for construction worker	no comment
11.2	Management of hazardous and contaminating materials	

No.	Issue	Observation
11.2.1	Microbial contamination	Should this be a Waste Water Management Programme, or are all aspects of waste included in one overall Waste Management Programme? What exactly is "construction effluent" (as opposed to "operational effluent")? Is there only one point of discharge of such effluent to the river?
11.2.2	Environmental contamination from spillage or disposal of fuels, lubricants, oils and solvents	The question is not just on spillage or disposal of waste oil and oil products, but also on storage (covered in the item) and use of these products. Activities like e.g. vehicle maintenance should be covered by the Action Plan (no washing or other maintenance of vehicles in or close to the river, parking of vehicles on sealed surface, good vehicle maintenance to minimise oil losses, etc.).
11.3	Management of solid waste	
11.3.1	Disposal of solid waste, Air pollution from on-site burning.	no comment
11.4	Soils and agriculture	
11.4.1	Topsoil compaction, rutting and mixing.	no comment
11.4.2	Erosion of soils on steep slopes	no comment
11.4.3	Loss of agricultural land	Resettlement issue –addressed in future retrofit of hydro and future resettlement
11.5	Air quality	
11.5.1	Impaired air quality from heavy equipment	no comment
11.6	Archaeological Sites	no comment
12	General Operation Issues	
12.1	Public and worker health and safety	
12.1.1	Risk to the public associated with the operation of HPP	no comment
12.1.2	Health of station staff	It is assumed that (for the operation, but more important for the construction phase) the required health infrastructure (sufficiently large, equipped and staffed) will be available on site, together with the necessary emergency plans (identification of referral hospitals, means of evacuation, etc.).
12.2	Management of hazardous and contaminating Materials	
12.2.1	Release of waste oil, hydraulic fluids, etc.	no comment
12.3	Management of solid waste	
12.3.1	Incremental effect at disposal location	Part of the Waste Management Plan mentioned in 11.2.1, BEL responsibility.
13	Cumulative Effects	
13.1	Cumulative effects on ecological and social conditions	no comment
14	Local Community and Development Benefit	
14.1	Allocation of benefits of the projects	To be addressed in Income Restoration and Community Development Plans (see comments in recommendation table). In which way are the employment opportunities for local inhabitants regulated? Needs a firm obligation of the contractor and a control mechanism.

No.	Issue	Observation
15	Macro Economic Benefit	
15.1	Creation of macro economic benefit for Uganda	no comment

4.3 ADDITIONAL ISSUES

A number of issues which are not (or not with sufficient detail) addressed in this list of monitoring and mitigation activities are discussed here briefly, and recommendations are being made.

Since work on these aspects is in progress, some of the observations may well be obsolete.

4.3.1 Environmental Responsibilities

There is one important point which should be mentioned or emphasised: the need for compatibility between sponsor's and contractor's Action Plans. Fig. 8.1 (p. 343) shows two sets of APs with no evident interconnection between the two. This could be shown in the figure, and it should be mentioned as one of the relevant points to be included in the Regulatory and Management Framework (Section 8.3.1). It seems obvious that first of all, the sponsor will have to define the rules and general requirements, based non which the contractor will then have to prepare his APs. These in turn will have to be approved by the sponsor before they enter in force.

4.3.2 Environmental Mitigation and Monitoring Plan (EMMP)

The basis for this Plan (and other plans related to it) are described shortly in Chapter 8.3 (Sponsor' Action Plans) and 8.4 (Contractor's Action Plans). Many or most of these plans deal with issues which are of special importance during the construction phase. Given the time table, with construction to start in June or July of this year, it becomes evident that these plans are on the critical path of the projects. The Sponsor needs to formulate the conditions for the Contractor's plans, and both need to prepare their plans in a way that the immediately relevant ones are in place and accepted (and applicable, meaning that the required infrastructure and human resources must be in place as well) before construction work actually starts.

This means that the development of these plans has high priority and needs to be carried out urgently. The point was discussed during the site visit to Uganda, and from these discussions it would seem that their preparation is in an advanced stage. However, work still needs to be done.

4.3.3 Water Quality Monitoring

Water quality monitoring is mentioned in various points in the list discussed above. In every case, this is monitoring of effluent (waste) or water or drinking water. However, there is no coherent water quality monitoring program as such.

It seems important that a river water quality monitoring will be carried out, covering at least the following two points:

- One point above the construction site at a distance which will ensure that this reflects the situation "without influence of the Projects". This means that the point chosen will have to be upstream of the quarry site (or of any site near the river where relevant projects-related activities will take place).
- One point below the construction site, in a distance sufficient to ensure a good mixing of the water in the river. This point will reflect the situation "with projects".

The monitoring of these points should be with high frequency (best on a continuous basis), but can be restricted to a few key parameters (like pH, conductivity, turbidity, O₂ concentration, temperature), while other parameters can be sampled on a weekly or monthly basis. The purpose of this program will be twofold, namely:

- To detect as quickly as possible any major projects-induced effect which would require immediate action (e.g. a massive rise in pH due to inflow of water containing concrete).
- To detect any water quality problem which would stem from upstream (i.e. not from the Projects), and for which the Projects therefore can not be held responsible.

4.3.4 Emergency Organization

According to the SEA (Section 8.3.6), there will be an Emergency Response and Preparedness Plan. It is assumed that this plan will also deal with potential cases in which the projects might require support from adjacent communities (i.e. referral organization in case of major accidents, ambulance services, support from municipal fire brigades, etc.).

5.0 PANEL'S NEXT REVIEW

It would seem appropriate that the Panel's next site visit should take place at or around the starting time of construction activities. Review of the EMP and related documents as well as checking of their implementation (including capacity aspects) will be important issues at that time.

ATTACHMENT 1: LIST OF MEETINGS HELD DURING 1ST SITE VISIT

Note: in every case, the PoE members were accompanied by members of the BIU team and/or other representatives of Bujagali HEP.

Date	PoE	Institution / Persons met	Main Topics
05.02.07	K. Connor R. Zwahlen	BIU Team	Briefing on Projects
05.02.07	K. Connor R. Zwahlen	Ministry of Energy Mr. F. Kabagambe Permanent Secretary	Topics included: <ul style="list-style-type: none"> ○ importance of the projects for the country ○ other measures for improving energy situation (energy efficiency program, policy on renewables like small hydro and geothermy. ○ role of Kalagala offset site
05.02.07	K. Connor R. Zwahlen	Interaid (Witness NGO) Mr. David Bizimana & Nasinyuama Sicolastica	Role of witness NGO (which is a local Ugandan NGO, not related to the international organization of the same name).
06.02.07	K. Connor R. Zwahlen	Nansana Resettlement Village (people from Kawanda Sub-Station)	Benefits and problems associated with Resettlement (e.g. land titles). Suggestions for future.
06.02.07	K. Connors R. Zwahlen	Resettlement Village Naminiya: Chairman plus group of villagers, including host community reps	Discussed benefits and problems related to the resettlement. Also took community suggestions for future.
06.02.07	R. Zwahlen	Fisheries Resources and Research Institute, Jinja	Meeting the Director of the Institute plus 5 specialists. They had been involved in the preparation of the EIA (aquatic biology), and they will carry out the monitoring in the operation phase.
07.02.07	K. Connor R. Zwahlen	Meeting in affected village on right bank (Namizi). Chairman and 30 persons including 10 females.	Village chose to resettle itself, as only partly affected by need for physical relocation. Discussed problems and benefits related to relocation. Also took community suggestions for future.
07.02.07	K. Connor R. Zwahlen	Nile Rafting Resort	They will lose the first part of their rafting trips, but they see possibilities for making use of the new situation.
07.02.07	K. Connor R. Zwahlen	District Environmental Office, Mr. Fredrik Barnzalive	Involvement of district environmental office in EIA process.
08.02.07	K. Connor R. Zwahlen	Uganda Nile Basin Discourse Forum (group of environmental NGOs) Ms. Sarah Naigaga, Coordinator Irene Ssekiyana, Greenwatch Ivan Twebembere, Greenwatch Dorothy Kagwa, Environmental Alert	Involvement of NGOs in the public participation process. 3 persons from other organizations joined the discussion. One NGO allegedly opposed to the Bujagali projects was not represented.
08.02.07	R. Zwahlen	Uganda Wildlife Authority, Mr. Richard Kapere	Involvement of UWA in EIA process; effects of Bujagali on wildlife sanctuary.
08.02.07	R. Zwahlen	Adrift (rafting organization), Mr. Cam McLeay	Effects of Bujagali HEP on their activities.

*Bujagali Hydropower and Interconnection Projects –
Report of the 1st Visit by the Panel of Social & Environmental Experts, February 2007*

Date	PoE	Institution / Persons met	Main Topics
09.02.07	K. Connor R. Zwahlen	UETCL Mr. Kiyemba Eriasi	Role of the transmission company for projects implementation (including resettlement and compensation).
09.02.07	K. Connor R. Zwahlen	Uganda Electricity Generation Company Ltd John E. Mugyenzi, Managing Director	Discussion of commitment and potential involvement in transmissions line environmental and social management.
09.02.07	R. Zwahlen	NEMA, Mr. W.A. Arnold	Structure, role and involvement of NEMA. Main responsible body for EIA process and also for coordinating participation of other ministries.
09.02.07	R. Zwahlen	Mr. Yokobo Moyini	Role of Forestry Authority in the EIA process and especially in the TL ROW assessment.

ATTACHMENT 2: CAMP & WORKFORCE MANAGEMENT – ISSUES FOR CONSIDERATION IN LOCATING AND PLANNING

Where to House

- What types of housing are needed and for whom?
- What are local community expectations for where the projects will house workers?
- Are there country regulations related to housing of construction employees? What are they?
- If a range of options exist, how will different options impact the community from the environmental, health, social, economic and infrastructure perspectives?
- Who is responsible for mitigating the impacts of different options?
- If workers were to be housed by local communities, are there a sufficient number of units in appropriate price categories to fill projects needs?
- Is there sufficient available housing in local communities to accommodate projects demand for housing without creating inflation in the cost of rental housing?
- If rental prices were to go up, would local residents be displaced?
- If there are not sufficient rental / housing units, how will this be managed?
- Will additional housing need to be constructed, existing units renovated and / or workers housed in mobile camps?

Impact on Water, Waste and Power Supplies

- Will the projects need water from existing local supplies to meet the needs of worker housing?
- Has a survey of affected local water supplies been completed and have all local uses of water been evaluated?
- Are local water supplies sufficient to meet projects needs, including worker housing, without having a negative impact on existing supplies, including during the time of greatest scarcity?
- If additional water supplies or wells are developed, how they will be used and managed during construction and post-construction?
- Who from local government and / or community groups should be involved in the planning and developing new water supplies?
- Are local waste disposal facilities adequate to handle the incremental wastes from the projects?
- Are there adequate power supplies for the projects or will existing infrastructure be over loaded?
- If new waste disposal or power facilities are needed, who in local government or local community groups should be involved?
- Who will be responsible for the new waste and power facilities during construction and post-construction?

Impact on Food Supplies

- How will projects workers be fed?
- In areas with limited local food supplies, how will food purchased and from whom?
- Are there opportunities to develop local agricultural and animal production practices to help meet projects needs and local community needs post-construction?
- Could increased demand for food created by the projects adversely affect the local population?

Schools

- Will the projects allow married status employees and children?
- If so, are there schools in local communities where worker housing will be located?
- Are existing educational facilities sufficient to meet the needs of employee families? If not, where will children be schooled?
- If projects employee's children will use local schools, what will be the impact on the local education system?

Recreation

- If projects employees are to be housed in the local communities, what local recreational facilities exist that will be used by workers?
- Are there sufficient facilities or will additional facilities need to be developed?
- If employees are to be housed in a camp, what type of recreational facilities will need to be developed that are interesting and appropriate to workers' cultural, social and religious traditions?
- If the community and the projects have decided to limit worker access to the local community are the planned recreational facilities at the camp enough to maintain worker morale?

Camp Location, Lay-Out & Design

- What are local community expectations for location of the worker camp and projects site?
- What are local community expectations for use of the construction site and its facilities after construction ends?
- If a range of options exist for location and lay-out, how will different options impact the community from environmental, health, social, economic and infrastructure perspectives?
- Are there any sites of archaeological or cultural / religious significance that would be impacted by site location?
- Will workers be allowed access to the community? If so, how will this affect camp location and lay out?
- How can the design of the projects site – lay out of roads, types of facilities – best meet community expectations and projects needs?
- Are there types of materials that can be used to better facilitate community use post construction?

- Can the principles of sustainable design be applied to the worker camp to minimize negative environmental impacts? See Sustainable Design note.

Camp Services

- What types of services will the camp require?
- Are there opportunities for local community businesses to provide services the camp? For example, food concessions, transportation, stores, shopping options, etc.

Transportation

Transportation Infrastructure

- Is existing transportation infrastructure adequate to meet projects needs or are upgrades and/or improvements needed?
- Will new permanent infrastructure need to be constructed?
- Will temporary infrastructure need to be constructed?
- What types of impacts will occur as a result of new or temporary infrastructure and upgrades / improvements?

Transportation Service

- If some workers are living away from the projects site, how will they be transported to work every day?
- Can existing transportation services handle worker transport?
- If not, is it possible to work with local businesses to provide worker transportation?

Health

- What is the general health status of the country / area where the projects will be constructed?
- What are the local health risks in the local community and the projects work force, such as sexually transmitted diseases (especially HIV/AIDS), water borne diseases, chemicals / pollution, alcohol and drug use?
- Who are the local health authorities?
- What is the structure of the local community health delivery system?
- What types of treatments / services are available and do they meet anticipated projects health needs?
- What are the local community expectations for how the projects will handle health issues?
- What are projects requirements for management of health risks?
- How will the cultural, social and/or religious traditions of projects workers influence management of health risks?
- Will education be needed to manage identified health risks?

Cultural Integration & Worker Behavior

- What are local expectations for contact between workers and community members, and worker access to local communities?
- What are the projects' needs regarding worker access to local communities?
- What types of health and safety risks might occur if workers have community access?
- How will worker access to communities be regulated?
- How will community access to the worker camp be regulated?
- What types of codes of conduct will be developed to regulate worker behavior both in camp and in town if community access is permitted?
- How will these codes of conduct reflect the community's cultural, social and religious traditions?
- How will these codes of conduct reflect the different cultural, social and religious traditions of the projects' workers?
- What types of activities and education / communication programs will be implemented to promote cultural understanding – both between workers of different cultures and between projects workers and the community?
- How can people or organizations in the local community be involved in developing these programs?