

FINAL REPORT

**ASSOCIATED FACILITY GAP ANALYSIS AND
REVIEW**

**VOLTA RIVER AUTHORITY
KUMASI –SUNYANI
TRANSMISSION LINE**

GHANA

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SUMMARY

Newmont Ghana Gold Ltd. (NGGL) is developing the Ahafo South Project and seeks to apply International Finance Corporation (IFC) social and environment safeguard policies to the Project and any associated facilities. The Volta River Authority (VRA) Kumasi – Sunyani Transmission Line was identified in the Ahafo South Project Environmental and Social Impact Assessment (ESIA), Brong Ahafo Region, Ghana, West Africa (NGGL 2005) as an associated facility. This Analysis Report identifies areas and degrees of non – compliance with applicable safeguard policies listed in the ESIA and recommends mitigation measures to bring the VRA transmission line into compliance.

During preparation of this Report the 153 km, 161 kV transmission line (t - line) between the Kumasi and Sunyani was under construction. Based on review of documents and a field visit in May 2006, this Report concludes that aside from three specific issues of concern the social and environment aspects of the VRA Kumasi-Sunyani transmission line are in compliance with IFC Performance Standards and Ghanaian government requirements with implementation of existing and planned mitigation measures. Issues of concern and recommended mitigation include:

- Sunyani A VRA land valuation team completed a Compensation Action Plan prior to commencing construction on the assumption that existing towers within the existing right-of-way (RoW) would be used to the outskirts of Sunyani. Construction proceeded with installation of new towers in a wider RoW that increased the number of project affected people. It is recommended that a Resettlement Action Plan (RAP) be prepared for this portion of the transmission line.
- Tano Offin Forest Reserve: This Forest Reserve includes an area of critical natural habitat. The original design included alignment of the transmission line across critical natural habitat within the Forest Reserve. It is recommended that the transmission line be realigned to avoid the critical habitat and measures be implemented to address potential induced impacts.
- Kumasi Substation: Design follows the existing RoW to the outskirts of Kumasi. Recommended mitigation is a risk analysis of using the existing towers. Should this not be possible a RAP is recommended.

This Report also identifies potential partnerships to optimize implementation of the recommended mitigation measures and improvements to the VRA environment and social management system (ESMS).

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INTRODUCTION

Newmont Ghana Gold Ltd. (NGGL) is developing gold reserves at the Ahafo South Project in the Brong Ahafo Region of Ghana, West Africa. The Ahafo South Project is located along a mineralized zone that extends approximately 70 kilometers (km) in the central portion of Ghana. Ghana is located on the Gulf of Guinea between Cote d'Ivoire on the west, Togo on the east, and Burkina Faso to the north. Approximately 21 million people inhabit Ghana, an area approximately 670 km north to south and 560 km east to west totaling 238,540 square km.

The Ahafo South Project is a gold mining and milling operation with a current expected mine-life of 15 years. Construction of the Ahafo South Project initiated during the first quarter of 2005 and mine operations commenced in January 2006. NGGL is anticipating financing from the International Finance Corporation (IFC) to continue development of the Project. In addition, NGGL will apply IFC social and environmental Performance Standards to the design, construction, operation, and closure of the Ahafo South Project and any associated facilities.

PROJECT DESCRIPTION

The VRA was set up as an electric power utility company established by an Act of Parliament in 1961. The primary business of VRA is to generate, transmit, and distribute electricity from the Akosombo Dam on the River Volta. The VRA owns and operates a countrywide transmission system consisting of approximately 3,670 circuit-kms of 161 kV transmission lines and 34 high voltage/medium voltage substations (**Figure 1**). Six hundred circuit-kms of the 161 kV lines are currently operated at 34.5 kV and are referred to as '161 kV light lines'.

The transmission system is basically a 161 kV loop serving loads in the southern part of the country and a single radial line from Kumasi to the north of Ghana, referred to as the Northern Transmission Circuit. This Northern Transmission Circuit supplies loads to several northern cities, including Sunyani, as well as facilitating export of electricity.

Supply of electricity to the Brong Ahafo Region is provided by the single Northern Transmission Circuit extending from the Kumasi Substation to the Techiman Substation. A 161 kV line brings power from the Techiman Substation to Sunyani.

VRA had initially intended to construct the 161 kV transmission line from the existing Kumasi Substation to the existing Sunyani Substation to ensure an alternate supply route to load centers in the Brong Ahafo region (including Sunyani) and other load centers in the Northern, Upper East, and Upper West regions of Ghana. The intent was to fulfill the objective of providing an alternate, more reliable, secure secondary transmission system to the northern regions.

NGGL requested that VRA realign the proposed transmission line in order to provide adequate electrical service to the mine site. VRA and NGGL entered into an

Memorandum of Understanding whereby NGGL would finance the reroute and VRA would supply electricity to the mine site. The Kumasi and Sunyani substations would remain as the beginning and end points for the 161 kV transmission line. The proposed original route and the realigned 153 km, 161 kV line to the mine site and connect to the Sunyani Substation is shown on **Figure 2**.

The IFC considers construction of the proposed VRA 161 kV transmission line between Kumasi and Sunyani (via the mine site) as an associated facility to the Ahafo South Project.

LITERATURE REVIEW

The base document for the gap analysis and review was the transmission line project Environmental Impacts Statement (Volta River Authority: Environmental Impacts Statement for the Kumasi-Sunyani 161 kV Transmission Project, December, 2004, Envirosound Associates: Environmental, Occupational Safety & Health Consultants).

Documents reviewed specific to the Ahafo South Project included:

- Environmental and Social Impact Assessment: Ahafo South Project, August 2005;
- Public Consultation and Disclosure Plan: Ahafo South Project, August 2005;
- Resettlement Action Plan [Rev. 1]: Ahafo South Project, 29 August 2005; and
- Independent Review and Supplemental Documents posted on the Ahafo South Project website).

In addition to the aforementioned transmission line and Ahafo South Project documents the following reports relating to field activities were provided:

- Ghana Electricity Development and Access Project (PO74191): Use of Country Safeguards System Assessment – Land Acquisition and Resettlement, November 28 to December 7, 2005, Contribution to Aide Me moiré, Kristine Ivarsdotter;
- Report on Sunyani – Newmont Plant Site Power Line Inspection, Ketiboa Blay, IFC Social/Community Development Consultant, December, 9, 2005; and
- Botanical Survey Report on Proposed Route of Ahafo Power Project (VRA Power Line) Through Selected Compartments in Tano-Offin Forest Reserve – Nkawie Forest District, Forestry Commission, January 5, 2006.

EXTERNAL GAP ANALYSIS APPROACH

NGGL has committed to independent external social, environmental, health, and safety evaluation and compliance monitoring in order to provide an additional level of transparency during implementation of social, environmental, health, and safety management programs. This commitment also applies to the VRA 161 kV Kumasi to Sunyani transmission line.

As per the Terms of Reference, the approach is to review areas and degrees of compliance or non-compliance with applicable IFC Performance Standards pertinent to the VRA transmission line. In addition, this Report includes a review of applicable requirements imposed by the Ghanaian government.

ENVIRONMENTAL AND SOCIAL REQUIREMENTS

Government of Ghana Requirements

- The Volta River Development Act 46, 1961 empowers the VRA to acquire rights-of-way (RoW) for constructing and operating electrical transmission systems. The VRA (Transmission Line Protection) Regulations (LI 542), 1967, provides for public safety and defines the transmission RoW to include the area extending for a distance of 15 m. on each side from the center line. The Regulation prohibits a number of activities in the RoW including mining, construction of buildings, and cultivation of certain crops.
- The Lands (Statutory Way Leaves) Act 186, 1963 provides the framework for acquisition of the RoW and requires consultation with settlements, communities and District Assemblies within the proposed project sphere of influence. Act 186 (and Act 46 above), provide for compensation payments to affected persons and agencies. The Project proponent is responsible for addressing all matters relating to prompt payment of adequate and fair compensation. Article 20, of the Constitution of Ghana prescribes that fair and adequate compensation be paid to all persons affected by state acquisitions.
- The Factories, Offices and Shops Act 328, 1970 promotes the health, welfare, and safety of persons employed. Employers are required to ensure a safe and healthy workplace is provided for the safety, health, and welfare of employees.
- The Environmental Protection Agency (EPA) Act 490, 1994 and the Environmental Assessment Regulations (LI 1652), 1999 describe environmental assessment (EA) procedures and requirements for obtaining an environmental permit from the EPA;
- The Energy Commission Act 541, 1997, Public Notice – EC, N. 003 requires proposed projects be registered with the Commission and obtain a permit prior to commencing construction. This permit is subject to the granting of an environmental permit from the EPA.
- National Forest Reserves are managed by the Forest Services Division in accordance with the Forestry Commission Act 571. An Memorandum of Understanding was signed October 20, 2003 between the Forest Service Division and VRA that “...set out the separate roles and responsibilities of the partnership to strengthen the collaborative initiative between the two agencies

for the efficient management of power related activities in National Forest Areas.”

Applicable IFC Policies and Guidelines

- **OP 4.01 – Environmental Assessment (EA):** All projects require an EA to ensure they are environmentally and socially sustainable. Applicable EA instrument for this project is an environmental impact assessment. Priority is to avoid environmental and social impacts. This policy also sets forth the minimum requirements for public consultation and public disclosure for projects.
- **OD 4.30 – Involuntary Resettlement:** The key principles of this directive are (i) physical and economic dislocation should be avoided or minimized where feasible; (ii) unavoidable displacement should involve the preparation and implementation of a resettlement action plan (RAP). All involuntary resettlement should be conceived and executed as development programs, with resettlers provided sufficient investment resources and opportunities to share in project benefits; (iii) displaced persons should be (a) compensated for their losses at full replacement cost prior to the actual move; (b) assisted with the move and supported during the transition period in the resettlement site; and (c) assisted in their efforts to improve their former living standards, income earning capacity, and production levels, or at least to restore them. Particular attention should be given to the needs of the poorest groups to be resettled; (iv) community participation in planning and implementing resettlement should be encouraged. Appropriate patterns of social organization should be established, and existing social and cultural institutions of resettlers and their hosts should be supported and used to the greatest extent possible; (v) resettlers should be integrated socially and economically into host communities so that adverse impacts on host communities are minimized; and (vi) land, housing, infrastructure, and other compensation should be provided to those adversely affected by project development. The absence of legal title to land should not be a bar to compensation.
- **OP 4.04 – Natural Habitats:** A commitment to promote and support natural habitat conservation and improved land use, and the protection, maintenance, and rehabilitation of natural habitats and their functions. No support for projects that involve significant conversion or degradation of critical natural habitats.
- **OP 4.09 – Pest Management:** Support for use of biological or environmental control methods instead of pesticides where there is a need for pest management.
- **OP 4.11 – Safeguarding Cultural Property:** International best practice with respect to safeguarding cultural property including sites having archaeological (prehistoric), paleontological, historical, religious, and unique natural values.

Policy is to assist in preserving cultural properties and to seek to avoid their elimination.

- 1999 – Child Forced Labor Statement: IFC will not support projects that use forced or harmful child labor. Forced labor consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty. Harmful child labor consists of employment of children that is economically exploitive, or is likely to be hazardous to, or interfere with, the child's education, or to be harmful to the child's health, or physical, mental, spiritual, moral or social development.
- 1998 – IFC Guidelines for Electric Power Transmission and Distribution: Provides guidance for RoW acquisition, construction and maintenance; safety and health; waste management and monitoring.
- 2003 – IFC Guidelines for Occupational Health and Safety: Covers general aspects of occupational health and safety supplemented with the appropriate national and international standards. An Occupational Health and Safety Management System is required to ensure an organizational framework to support the occupational health and safety program, a hazard prevention program, performance monitoring and evaluation.

GENERAL OBSERVATIONS

Field Visit

Field work to support the 'Associated Facility Gap Analysis and Review' was completed in early May, 2006. At that time construction had begun on the 153 km long, 161 kV transmission line from the Kumasi to Sunyani Substations. Construction of the 39 km section from Sunyani substation to the Ahafo Mine substation was complete. This section includes 98 towers and VRA was conducting an inspection prior to energizing the line which was expected by mid-May. Construction on the 114 km spread from the Ahafo Mine site to Kumasi substation was underway. Foundations for 40 of the 275 towers required for this section have been completed and are staged near Ahafo Mine site.

Field activities are itemized in the Activity Log in **Appendix A**.

Overall Observations

The following observations are based on review of project documents and field observations:

- The VRA Project Environmental Impacts Statement (December, 2004) accurately describes project and baseline environmental and social conditions; covers the

- range of potential environmental and social impacts and proposes appropriate mitigation and monitoring (Act 490, LI 1652, and OP 4.01);
- Based on the December, 2004 Environmental Impacts Statement the Government of Ghana EPA granted an environment permit in 2005 (Act 490, Act 451);
 - The December, 2005 Environmental Impacts Statement and VRA staff actively promote the principle of first avoiding environmental and social impacts if reasonable. (Act 490, LI 1652, OP 4.01, OD 4.30, OP 4.04 and OP 4.11);
 - In rural areas (south of Sunyani to the mine site) the project footprint is minimal, disturbance minimized and the RoW is well maintained. For example, the RoW across the Amama Shelterbelt Forest Reserve follows the corridor of the existing highway, existing transmission line and crosses lands cleared for cultivation (Act 490, LI 1652, Act 46, OP 4.01, OD 4.30 and OP 4.04);
 - In rural areas VRA consults early and systematically with land users/landowners, particularly with respect to ownership and land use issues and, in accordance with the laws of Ghana, discloses to individual settlements and communities agreed compensation entitlements (Form “F”) prior to commencement of construction activities. As there is no physical relocation nor resettlement in these rural areas the practice of preparing a Compensation Action Plan (CAP) is appropriate (Act 46, Act 186, Act 490, LI 1652, OP 4.01, OD 4.30);
 - VRA is an active partner with the Forest Services Division in implementing the provisions of the October, 2003 MOU as they pertain to the Forest Reserves (multiple use areas designated for forest rehabilitation) crossed by the transmission line (Amama Shelterbelt Forest Reserve, Tano Offin Forest Reserve, Offin Shelterbelt Forest Reserve and Gyemera Forest Reserve (October, 2003 MOU, Act 490, LI 1652, Act 541, OP 4.01, OP 4.04);
 - Occupational health and safety practices at the new substations and those being upgraded and at other observed construction sites were generally good and public safety provisions (such as adequate fencing) were in place (Act 46, Act 328, Op 4.01, 1998 and 2003 IFC Guidelines, 1999 Child Forced Labor Statement);
 - VRA’s engineering, environment, and estates departments are actively involved at the project level (Act 490, LI 1652, OP 4.01).

ISSUES OF CONCERN

Three specific issues are of concern on the VRA transmission line from Kumasi to Sunyani. In addition, there is an issue relating to the ESMS within VRA which has been/could be a critical factor in resolving the three specific issues of concern on the transmission line. This report does not focus on issues related to compensation and payment schedules as these have been addressed by Mr. Ketiboa Blay (IFC) nor the relative merits of cash compensation versus in kind compensation and income restoration which have been covered by Ms. K. Ivarsdotter (see 'Associated Facility Opportunities IFC' section below).

Sunyani Substation

Construction on the 161 kV line from the Sunyani Substation to the Ahafo Mine site has been completed. From the substation to the outskirts of Sunyani the new 161 kV line follows the existing 35 kV line corridor built in 1987. The VRA Estates Services, along with the Lands Valuation Board of Ghana, completed valuations along the existing 30 m RoW (which has had encroachment over the years) in accordance with Act 46, LI 542 and Act 186. VRA Estates Services was of the understanding that the towers for the 161 kV line would be placed in alignment with the existing 35 kV towers, which would not require widening of the RoW. Due to technical issues in relation to adjacent 35 and 161 kV lines the towers could not be aligned as envisaged by the Estates Services group. Hence, the new towers have been placed adjacent to the existing 35 kV towers, which required widening of the RoW.

Apparently, Estates Services were informed of the issue after the fact. The result has been that construction was begun and completed before valuations were undertaken and compensation paid along the expanded RoW. It is not clear who made the decision on technical grounds (VRA Engineering Services or the Contractor).

At the time of the field visit, residents of the South Industrial Estate (Magazine) had retained counsel (K. Amofa – Agyemang) to take the issue up with VRA. Their concerns were first brought to the attention of VRA, according to the information provided by K. Amofa – Agyemang, in February 2006. A subsequent meeting between counsel and VRA on this matter took place on April 24. The Magazine has filed a complaint with VRA and has conducted its own valuation (which has not been disclosed to VRA). A response from VRA is pending but no timing of a response was indicated at a May 12 close out meeting between the IFC, VRA, and myself.

Tano Offin Forest Reserve

The 161 kV transmission line will cross four Forest Reserves. Under the October, 2003 MOU with the Forest Service Division VRA has obtained approval to traverse the Forest Reserves under the specific conditions outlined in the MOU (Impassable roads precluded a field visit to the Offin Shelterbelt Forest Reserve and Gyemara Forest Reserve).

In the Tano Offin Forest Reserve the Forest Service Division conducted a botanical survey along the proposed transmission line RoW. The survey identified Compartment 98 (72 km from the Kumasi Substation) as a 'Globally Significant Biodiversity Area' (GSBA) due to the occurrence of endemic and rare species (Botanical Survey Report January 2006) A survey pin for the proposed transmission line was located within the 128 ha. comprising Compartment 98. During a May 9 visit to Compartment 98 VRA Engineering Services, the VRA contractor and Forest Services Division representative agreed to realign the RoW around Compartment 98 (the actual RoW awaits more detailed design work).

Compartment 98 and surrounding compartments are under siege. A legal logging road crosses through Compartment 98 and farmers were clearing land along this route into Compartment 98. Illegal logging (primarily individuals with chainsaws) is routine in the area which is in addition to legal logging..

Kumasi Substation

VRA intends to use the existing 161 kV transmission line RoW from the Kumasi Substation to Obuasi as egress from Kumasi. Approximately 26 towers will be required over approximately 4 kms before the line turns westward toward the Ahafo Mine site and Sunyani.

This existing RoW is the easiest route from the Kumasi Substation but has challenges. Encroachment into the 30 m RoW is common. Adjacent property owners have routinely built brick/mortar fences in the RoW, squatters have set up homes and small commercial outlets at most crossroads, and crops planted in the remaining openings.

VRA Environmental and Social Management System

Although the December, 2004 Environmental Impacts Statement and the project Compensation Action Plan (CAP) demonstrate competence within VRA in understanding the laws and regulations in Ghana and generating quality assessments and recommending mitigation/compensation measures there is a major weakness in terms of implementation.

The Sunyani Substation issue is a case in point.

In the instance of the Compartment 98 issue in the Tano Offin Forest Reserve the complexity of the issues and how they could or could not be resolved are beyond the capacity of staff to address as, in my view, they are inexperienced in such matters.

In her contribution to the Aide Memoire , Ms K. Ivarsdotter states that during her visit to the Sunyani – Ahafo Mine transmission line project in late 2005 she concluded that VRA was doing a good job but that this was a relatively straight forward (uncomplicated) job with predominantly rural populations temporarily affected (receive compensation then return to their land) and no physical relocation. The question

remained, in her words, how VRA would handle more complex projects (urban areas) with a large number of physical relocations. VRA Estate Services staff is challenged by the Sunyani Substation corrective action process and are very apprehensive of the challenges ahead at the Kumasi Substation as the issues are complex and go beyond their core expertise of valuation of compensation entitlements.

RECOMMENDATIONS

At the moment there are no gross safeguard policy violations (defined as a violation that would prevent the IFC from considering financing the VRA transmission line project). However, there are three instances of existing/potential non-compliance that, should they not be addressed as soon as reasonably possible, could result in gross violations. Also, the capacity of the VRA Environmental and Social Management System must be addressed in order to ensure proper screening of implementation measures throughout the remaining construction and into operation and maintenance.

Sunyani Substation

Attempting to resolve the Sunyani Substation situation, in particular the South Industrial Estate matter, with the traditional CAP approach will not satisfactorily resolve the issues in accordance with OD 4.30 or Act 186. Expansion of the RoW requires relocation (defined in the VRA Environmental Impacts Statement, December, 2004 as the loss of structures) and the historic encroachment will most likely require resettlement (move livelihood/residence elsewhere). A RAP designed to address the prevailing situation with full participation of project-affected persons is a compliance requirement. In addition, not satisfactorily resolving the situation at the Sunyani Substation will make it almost impossible for VRA to move forward on the Kumasi Substation issue.

It is critical that the RAP for the Sunyani Substation include a transparent grievance mechanism and participation by a Witness NGO. VRA, in conjunction with the Land Valuation Board, has an internal grievance mechanism geared largely toward compensation and will need to be expanded in scope in this exercise. Transparency of the grievance process will be critical to success of the RAP.

The December 2004 Environmental Impacts Statement recommends that a Witness NGO be retained to oversee resettlement associated with the project. This was never acted upon by VRA. I was told that their criteria were to find someone local and with capacity – criteria, they say, could not be met by any local NGO VRA had encountered.

It is also critical that VRA immediately address the South Industrial Estate matter. VRA must not wait until completion of the RAP to deal with this matter. Resolving this issue immediately should not preclude the South Industrial Estate from entitlements identified in the RAP when it is completed.

Tano Offin Forest Reserve

Work to date by VRA and the Forest Service Division, Nkawie District on rerouting the transmission line in the Tano Offin Forest Reserve is a good first step. However, international best practice demonstrates that areas of biodiversity are best protected when the core area (Compartment 98) is provided with a buffer zone. In order to ensure compliance with the provision in OP 4.04 that there should be no significant conversion or degradation of critical natural habitat (Compartment 98) a buffer zone will need to be identified and factored into the reroute.

Avoiding direct impacts by rerouting is the first step in compliance. Induced impacts (where one project may trigger secondary development and its impacts) also need to be managed. While the reroute will avoid direct impacts to Compartment 98 the RoW may facilitate access to the core and buffer zones. An Access Management Plan (such as the systematic decommissioning of construction access tracts) is recommended to address this potential impact. An Access Management Plan should also address designation of a buffer zone. The Access Management Plan must also deal with the existing legal logging road issue. Actions, schedule, responsibilities and budget are to be key components of the Access Management Plan. Partnership between VRA, Forest Service Division, and biodiversity management experts must be developed to prepare and implement an Access Management Plan.

The Access Management Plan must be completed before construction begins on this section of the transmission line.

Kumasi Substation

Every effort must be made at the Kumasi Substation to evaluate the merits of double circuiting one set of new towers out of Kumasi. The non-compatibility issue encountered at Sunyani is not replicated here as they are both 161 kV lines. A Risk Analysis should be conducted whereby the costs associated with resettlement on all options are factored into the analysis and considered in the final decision.

Even if one set of towers is determined to be the preferred option a RAP will be required. Compensation, relocation and resettlement will need to be components of the RAP. Similar to the Sunyani Substation RAP, it should be participatory, employ a transparent grievance mechanism and include a Witness NGO. The RAP must be completed before construction begins on this section of the project.

VRA Environmental and Social Management System

VRA needs to incorporate a Change Management Procedure (CMP) into its Environmental and Social Management System framework. A CMP would require any proposed changes to approved mitigation/compensation/monitoring in the project Environmental Impacts Statement and CAP/RAP go through a formal internal review process within VRA. For example, in the instance of the Sunyani Substation issue the

decision to offset the 161 kV line from the existing 35 kV line would have required approval through a CMP. Had a CMP been implemented Estate Services in VRA would have been informed before the unilateral decision was made.

A CMP mainstreams environmental and social considerations identified in the assessment and planning stages through to the implementation stage. Incorporation of the CMP in VRA should be completed before construction of the Kumasi Substation section begins and the RAP moves to the implementation stage.

ASSOCIATED FACILITY OPPORTUNITIES

International Finance Corporation

The Sunyani – Kumasi transmission line project provides an excellent opportunity to assist the World Bank in its capacity building work in Ghana.

The Ghana Electricity Development Project (PO74191) has the objective of comparing Ghanaian legislation in the sector to the World Bank OP 4.00 (Piloting the Use of Borrower Systems to Address Environmental and Social Issues in Bank Supported Projects). VRA is a key target institution in building capacity and the issues of biodiversity management and resettlement are World Bank priorities.

The traditional World Bank approach to capacity building is training with little relationship to existing issues, particularly in the private sector. The VRA Kumasi – Sunyani transmission line provides resettlement and biodiversity opportunities whereby VRA can ‘learn by doing’. The World Bank would like VRA to move beyond cash compensation to income restoration, monitoring and evaluation, addressing vulnerable group issues, and working with NGOs. The Sunyani and Kumasi Substation resettlement issues would be ideal venues for the World Bank to assist VRA in moving from the traditional CAP to a RAP.

On the biodiversity management front World Bank is working with the Forestry Commission on their approach. During the May 9 visit to the Nkawie District office, World Bank biodiversity specialists were to visit with the Forest Service Division to review their programs. The Compartment 98 issue should be of considerable interest to the World Bank.

IFC could also work with World Bank on VRA issues related to compensation raised in the respective reports of Ivarsdotter and Blay (cited above). In particular the VRA/LVB relationship which appears to be of particular interest to the World Bank should be pursued. Also broader disclosure of the project December 2004 Environmental Impacts Statement, project CAP (not completed at time of my visit) and future RAPs for Sunyani and Kumasi should be encouraged by IFC and the World Bank.

IFC also has extensive experience with the CMP and should assist VRA in this important area.

Newmont Ghana Gold Ltd.

Because NGGL is financing the Kumasi – Sunyani transmission line project, it is more than just of passing interest as an IFC associated facility. There are huge risks if things do not go right. There are benefits in participating proactively with institutions like VRA and the Forest Services Division that will likely be involved in future NGGL projects.

The NGGL partnership with Conservation International – Ghana and the accompanying Biodiversity Management Program could be very helpful in resolving issues confronted in and around Compartment 98 in the Tano Offin Forest Reserve. Involvement with VRA environment staff on this issue would lay the groundwork for other projects having complex issues to resolve. The prospects are similar with the Forest Services Division.

On the resettlement front NGGL should be able to assist in the proposed Risk Analysis on options for the transmission line out of the Kumasi Substation. Also, the Witness NGO (Guards of the Earth and Vulnerable?) utilized on the Ahafo South Project RAP may be of assistance on the two RAPs recommended in this report.

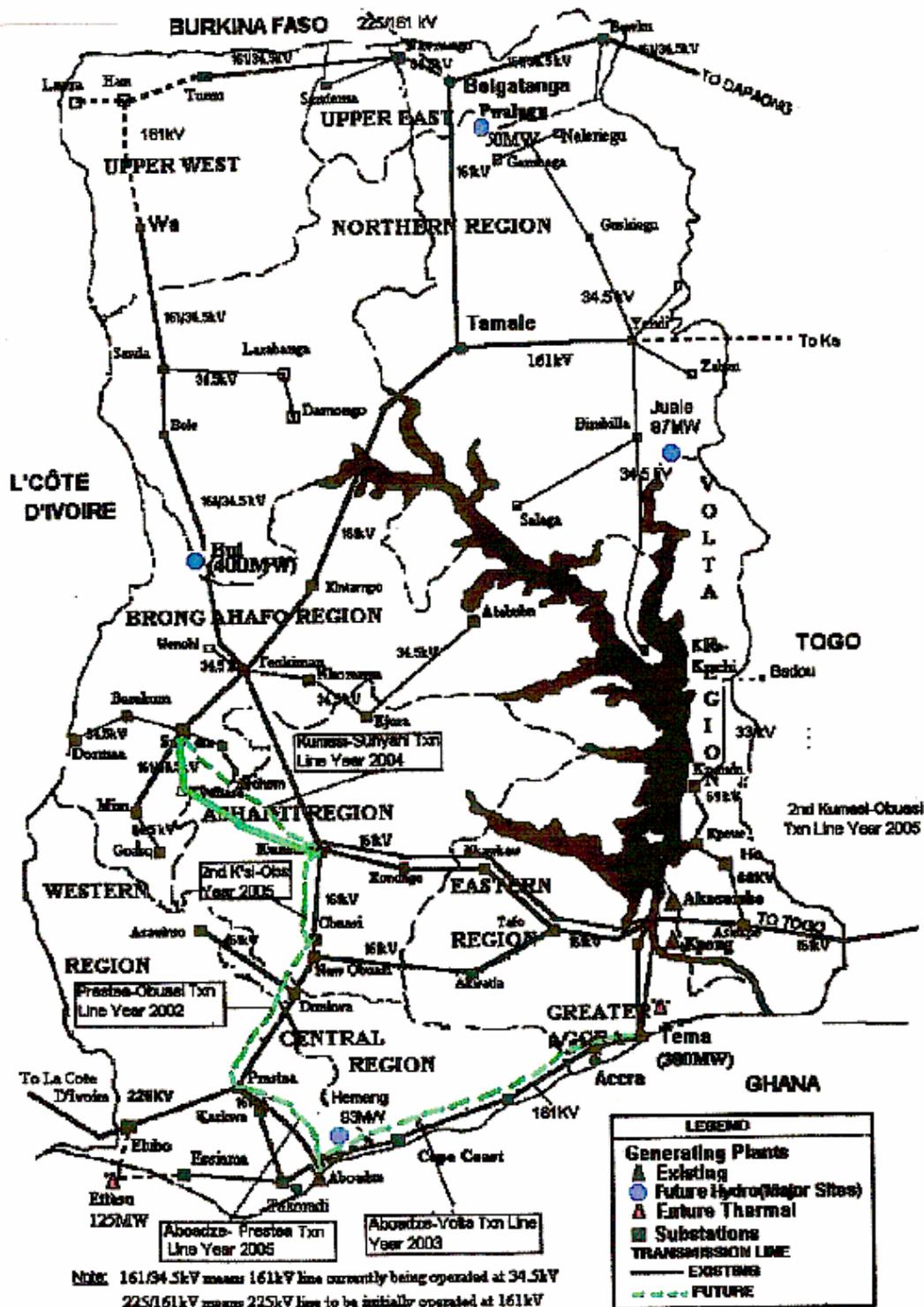
NGGL is urged to work with VRA to broadly disclose the December 2004 Environmental Impacts Statement, the CAP and RAPs. Disclosure at existing NGGL Information Centers would be an ideal start.

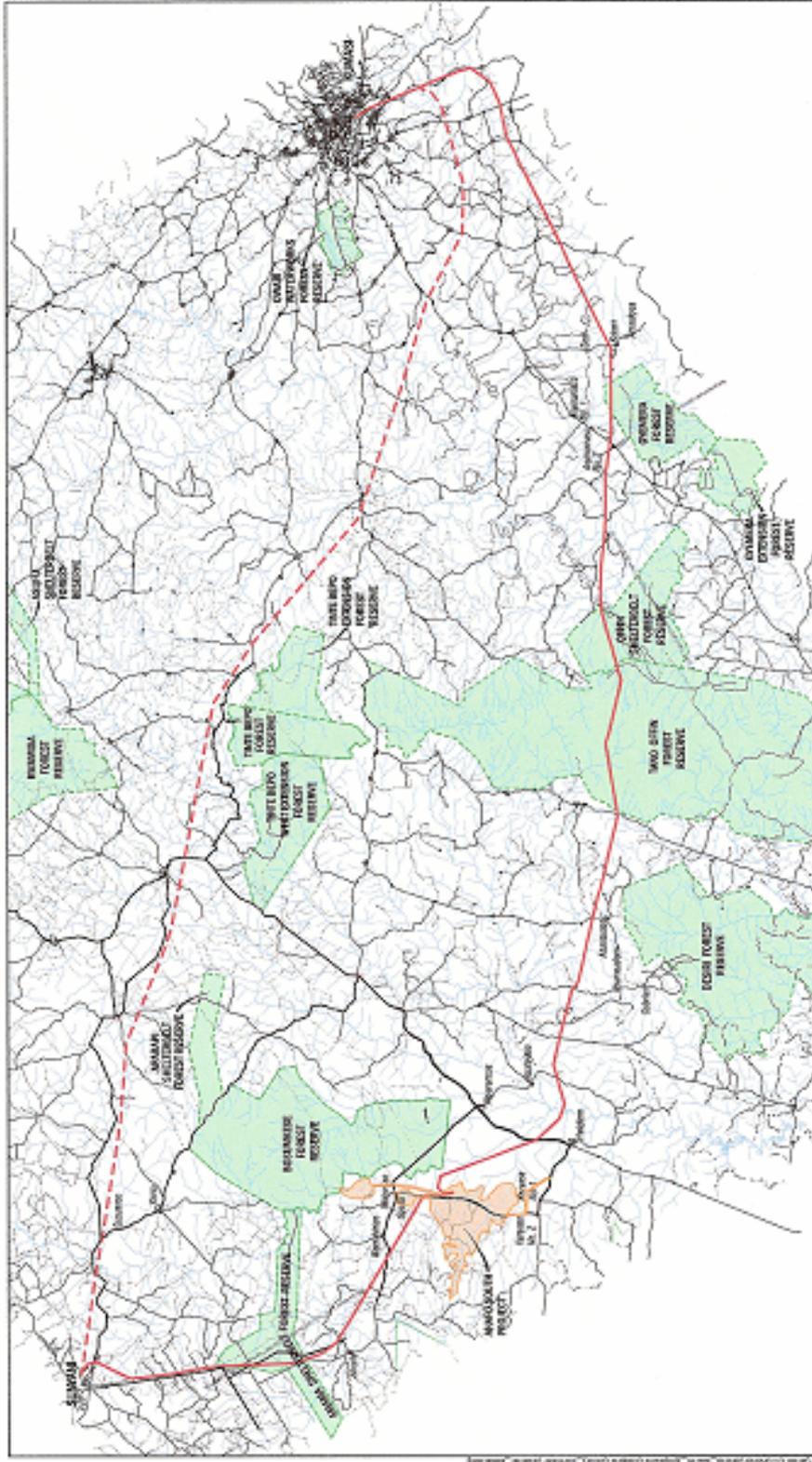
CONCLUSION

The VRA Kumasi-Sunyani transmission line is in compliance with the Government of Ghana requirements. At the time of the field visit (May 2006) the VRA transmission line had three issues of concern relating to compliance with the IFC safeguards: resettlement in the vicinity of the Sunyani substation; the critical natural habitat area within the Tano Offin Forest Reserve; and resettlement in the vicinity of the Kumasi substation. This report recommends mitigation to resolve each issue of concern thereby achieving compliance with the applicable IFC safeguard. Recommendations are also made on improving the VRA ESMS to improve project implementation. Also, the VRA transmission line issues of concern provide an excellent opportunity for a variety of stakeholders to collaborate on achieving outcomes of mutual benefit.

FIGURES

Figure 1 Transmission Grid and Generating Plant Sites in Ghana





- Volta River Authority Proposed Power Corridor
- Volta River Authority Old Proposed Power Corridor
- Main Road
- Secondary Road
- Hydraulic Feature

Volta River Authority Power Corridor
 Ahafo South Project
 Brong Ahafo Region, Ghana
FIGURE 2

APPENDIX A
ACTIVITY LOG

Activity Log April-May 2006

- April 24 to May 5: Review of pertinent project documents.
- May 7: Arrive in Accra, Ghana.
- May 8: Meeting in Accra with Volta River Authority (Estates, Environment, Engineering) to plan project visit logistics. Accompanied by Nick Flanders, IFC.
- May 8: Drive to Kumasi. Working dinner with VRA field staff.
- May 9: Morning meeting VRA and Forest Services Division representatives at the Nkawie District Office of the Forest Services Division.
- May 9: Afternoon visit to the Tano Offin Forest Reserve and Compartment 98 (approximately 72 km from VRA Kumasi Substation) within the Reserve determined by the Government of Ghana Forest Commission as a Globally Significant Biodiversity Area (GSBA).
- May 9: Brief visit to VRA Kumasi Substation, drove to Sunyani.
- May 10: Tour of the VRA Sunyani Substation, RoW out of Sunyani and the South Industrial Estate (Magazine) along the RoW.
- May 10: Drive the length of the completed 161 kV t-line from outskirts of Sunyani to mine site VRA Substation which included drive through the Amama Shelterbelt Forest Reserve.
- May 10: Meeting at mine site VRA Substation with VRA Estates, Environment and Engineering Services representatives and representatives of the Land Valuation Board (LVB) to discuss in detail the compensation and consultation process completed for the 39 km completed t-line from Sunyani to the mine site.
- May 10: Drive from VRA Substation eastward along proposed VRA t-line route then to Kumasi.
- May 11: Drove the proposed existing RoW from the VRA Kumasi Substation to the outskirts of Kumasi (Tower #26). Discussion with owner of sawmill at Tower # 20.
- May 11: Drive from Kumasi to Accra. Meeting in Accra with K. Amofa-Agyemang, Lawyer, Investment and Property Consultant representing PAPs in the South Industrial Estate (Magazine).

May 12: Preparation of 'Initial Brief Summary Report' as per TOR and e-mailed to NGGL and IFC. Met with Nick Cotts, NGGL, and Nick Flanders, IFC to discuss the 'Initial Brief Summary Report'.

May 12: Along with Nick Flanders, IFC, met with VRA Real Estate and Environment representatives in Accra for debriefing.