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 Administration - Volume 2

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RECORDS MANAGEMENT SECTION

LOAN NUMBER 618 GH

Guarantee Agreement

(Volta Expansion Project)

BETWEEN

REPUBLIC OF GHANA

AND

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

DATED JUNE 23, 1969

LOAN NUMBER 618 GH

Guarantee Agreement

(Volta Expansion Project)

BETWEEN

REPUBLIC OF GHANA

AND

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

DATED JUNE 23, 1969

Guarantee Agreement

AGREEMENT, dated June 23, 1969, between REPUBLIC OF GHANA (hereinafter called the Guarantor) and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (hereinafter called the Bank).

WHEREAS by the Loan Agreement of even date herewith between the Bank and Volta River Authority (hereinafter called the Borrower) the Bank has agreed to make to the Borrower a loan in various currencies equivalent to six million dollars (\$6,000,000), on the terms and conditions set forth in the Loan Agreement, but only on condition that the Guarantor agree to guarantee the obligations of the Borrower in respect of such loan as hereinafter provided; and

WHEREAS the Guarantor, in consideration of the Bank's entering into the Loan Agreement with the Borrower, has agreed so to guarantee such obligations of the Borrower;

NOW THEREFORE the parties hereto hereby agree as follows:

ARTICLE I

SECTION 1.01. The parties to this Agreement accept all the provisions of the General Conditions Applicable to Loan and Guarantee Agreements of the Bank dated January 31, 1969, with the same force and effect as if they were fully set forth herein (said General Conditions Applicable to Loan and Guarantee Agreements being hereinafter called the General Conditions).

SECTION 1.02. Wherever used in this Agreement, unless the context otherwise requires, the several terms defined

in the General Conditions and in Section 1.02 of the Loan Agreement have the respective meanings therein set forth.

ARTICLE II

SECTION 2.01. Without limitation or restriction upon any of its other obligations under this Guarantee Agreement, the Guarantor hereby unconditionally guarantees, as primary obligor and not as surety merely, the due and punctual payment of the principal of, and interest and other charges on, the Loan and the Bonds, the premium, if any, on the prepayment of the Loan or the redemption of the Bonds prior to their maturity, and the punctual performance of all the obligations of the Borrower, all as set forth in the Loan Agreement and in the Bonds.

SECTION 2.02. Without limitation or restriction upon the provisions of Section 2.01 of this Agreement, the Guarantor specifically undertakes, whenever there is reasonable cause to believe that the funds available to the Borrower (including the funds specified in Section 23(1) and (2) of the Volta River Development Act, 1961) will be inadequate to meet the estimated expenditures required for carrying out the Project, to make arrangements, satisfactory to the Bank, promptly to provide the Borrower or cause the Borrower to be provided with such funds as are needed to meet such expenditures.

ARTICLE III

SECTION 3.01. It is the mutual intention of the Guarantor and the Bank that no other external debt shall enjoy any priority over the Loan by way of a lien on governmental assets. To that end, the Guarantor undertakes that, except as the Bank shall otherwise agree, if any lien shall be created on any assets of the Guarantor as security for any external debt, such lien will *ipso facto* equally and ratably secure the payment of the principal of, and interest and

(c) The Guarantor shall afford all reasonable opportunity for accredited representatives of the Bank to visit any part of the territories of the Guarantor for purposes related to the Loan.

SECTION 3.03. The principal of, and interest and other charges on, the Loan and the Bonds shall be paid without deduction for, and free from, any taxes, and free from all restrictions, imposed under the laws of the Guarantor or laws in effect in its territories; provided, however, that the provisions of this Section shall not apply to taxation of payments under any Bond to a holder thereof other than the Bank when such Bond is beneficially owned by an individual or corporate resident of the Guarantor.

SECTION 3.04. This Guarantee Agreement, the Loan Agreement and the Bonds shall be free from any taxes that shall be imposed under the laws of the Guarantor or laws in effect in its territories on or in connection with the execution, issue, delivery or registration thereof.

SECTION 3.05. (a) Except as the Bank shall otherwise agree, the Guarantor shall, to the extent that it has an interest therein and is obligated or entitled to do so, take all action necessary to maintain in full force and effect, and secure the prompt and diligent performance by the parties thereto of, the Scheduled Documents.

(b) The Guarantor and the Bank shall exchange views as to any arbitration or any proceeding before the Referee contemplated or undertaken pursuant to any of the Scheduled Documents in which the Guarantor has an interest. The Guarantor shall promptly advise the Bank of any such arbitration or other proceeding contemplated or undertaken and shall give the Bank such information as the Bank shall reasonably request to enable the Bank if it so desires to make its views thereon known to the Guarantor and in any such arbitration or other proceeding.

other charges on, the Loan and the Bonds, and that in the creation of any such lien express provision will be made to that effect; provided, however, that the foregoing provisions of this Section shall not apply to: (i) any lien created on property, at the time of purchase thereof, solely as security for the payment of the purchase price of such property; (ii) any lien on commercial goods to secure a debt maturing not more than one year after the date on which it is originally incurred and to be paid out of the proceeds of sale of such commercial goods; or (iii) any lien arising in the ordinary course of banking transactions and securing a debt maturing not more than one year after its date.

The term "assets of the Guarantor" as used in this Section includes assets of the Guarantor or of any of its political subdivisions or of any agency of the Guarantor or of any such political subdivision, including, without limitation, the Bank of Ghana and the Ghana Commercial Bank.

SECTION 3.02. (a) The Guarantor and the Bank shall cooperate fully to assure that the purposes of the Loan will be accomplished. To that end, each of them shall furnish to the other all such information as shall be reasonably requested with regard to the general status of the Loan. On the part of the Guarantor, such information shall include information with respect to financial and economic conditions in the territories of the Guarantor and the international balance of payments position of the Guarantor.

(b) The Guarantor and the Bank shall from time to time exchange views through their representatives with regard to matters relating to the purposes of the Loan and the maintenance of the service thereof. The Guarantor shall promptly inform the Bank of any condition which interferes with, or threatens to interfere with, the accomplishment of the purposes of the Loan or the maintenance of the service thereof.

SECTION 3.06. The Guarantor, except as the Bank shall otherwise agree: (a) shall not undertake or assist in the financing of an additional major power project in its territories unless (i) such project would not prevent or materially interfere with the successful construction and operation of the Project and the project described in the First Bank Loan Agreement and (ii) there is adequate economic justification for such additional project, taking into account not only the said project standing by itself but also the effect of such project on the obligations assumed by the Guarantor and the Borrower in connection with the Project and the project described in the First Bank Loan Agreement; and (b) shall consult with the Bank before it undertakes or assists in the financing of a major power project in its territories.

SECTION 3.07. The Guarantor shall not, without the prior approval of the Bank, (a) agree to any amendment of the agreement between the Guarantor and the Export-Import Bank of the United States relating to the guarantee under certain circumstances of the loans to be made pursuant to the Exim-Valco Loan Agreement and Second Exim-Valco Loan Agreement, or (b) take or permit any action to be taken which shall lead to the occurrence of an Event of Guarantee under such agreement between the Guarantor and the Export-Import Bank of the United States.

ARTICLE IV

SECTION 4.01. The Guarantor shall endorse, in accordance with the provisions of the General Conditions, its guarantee on the Bonds to be executed and delivered by the Borrower. The Commissioner responsible for Finance of the Guarantor and such person or persons as he shall appoint in writing are designated as the authorized representatives of the Guarantor for the purposes of Section 8.10 of the General Conditions.

ARTICLE V

SECTION 5.01. The Commissioner responsible for Finance of the Guarantor is designated as representative of the Guarantor for the purposes of Section 10.03 of the General Conditions.

SECTION 5.02. The following addresses are specified for the purposes of Section 10.01 of the General Conditions:

For the Guarantor:

The Principal Secretary
Ministry of Finance
P. O. Box M40
Accra, Ghana

Alternative address for cables:

Prudence
Accra

For the Bank:

International Bank for
Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Alternative address for cables:

Intbafrad
Washington, D.C.

IN WITNESS WHEREOF, the parties hereto, acting through their representatives thereunto duly authorized, have caused this Guarantee Agreement to be signed in their respective names and to be delivered in the District of

Columbia, United States of America, as of the day and year first above written.

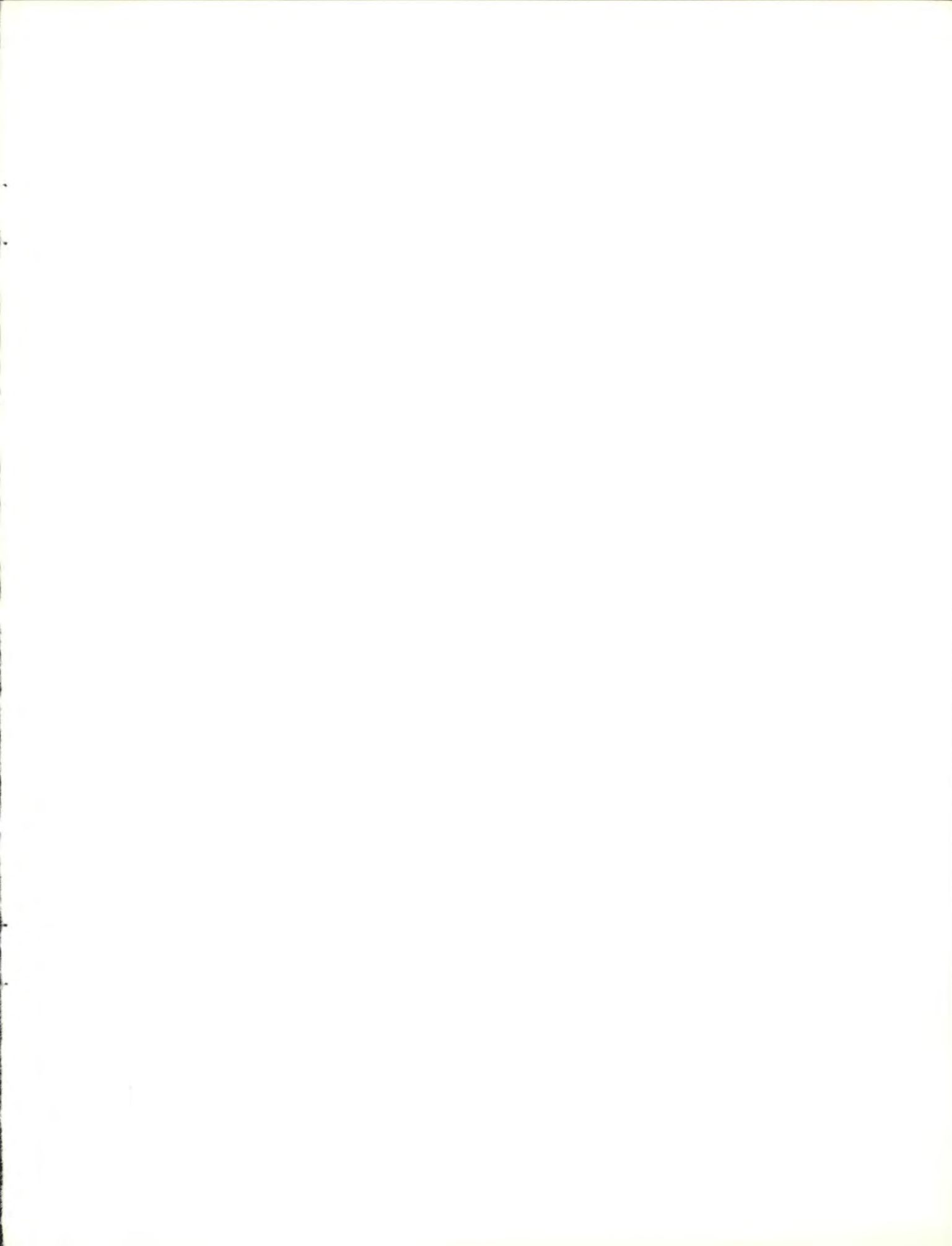
REPUBLIC OF GHANA

By /s/ E. M. DEBRAH
Authorized Representative

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

By /s/ J. BURKE KNAPP
Vice President





LOAN NUMBER 618 GH

Loan Agreement

(Volta Expansion Project)

BETWEEN

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

AND

VOLTA RIVER AUTHORITY

DATED JUNE 23, 1969

LOAN NUMBER 618 GH

Loan Agreement

(Volta Expansion Project)

BETWEEN

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

AND

VOLTA RIVER AUTHORITY

DATED JUNE 23, 1969

Loan Agreement

AGREEMENT, dated June 23, 1969, between INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (hereinafter called the Bank) and VOLTA RIVER AUTHORITY (hereinafter called the Borrower), a corporation established under the Volta River Development Act, 1961, of the Republic of Ghana (hereinafter called the Guarantor).

ARTICLE I

General Conditions; Definitions

SECTION 1.01. The parties to this Agreement accept all the provisions of the General Conditions Applicable to Loan and Guarantee Agreements of the Bank dated January 31, 1969, with the same force and effect as if they were fully set forth herein (said General Conditions Applicable to Loan and Guarantee Agreements being hereinafter called the General Conditions).

SECTION 1.02. Wherever used in this Agreement, unless the context otherwise requires, the several terms defined in the General Conditions have the respective meanings therein set forth, and the following additional terms have the following meanings:

(a) "First Bank Loan Agreement" means the agreement dated February 8, 1962 between the Bank and the Borrower, providing for a loan to the Borrower in an amount in various currencies equivalent to \$47,000,000.

(b) The terms "AID Loan Agreement", "Exim-Authority Loan Agreement", "UK Loan Agreement", "Master Agreement", "Power Contract", "Subscription Agreement", "Long Term Tolling Contracts", "Exim-Valco Loan Agreement", "Voting Trust Arrangements", "Valco Current Accounts Trust" and "Scheduled Documents" mean the respective agreements and documents referred

to in the meanings assigned to such terms in the First Bank Loan Agreement as such agreements and documents have been, or shall be, amended with the agreement of the Bank.

(c) "Canadian Loan Arrangements" means the agreement to be entered into between the Guarantor and the Government of Canada providing for a loan to the Guarantor in the amount of approximately \$5,400,000 equivalent for the generators and certain of the substation facilities at Akosombo referred to in paragraphs (1) and (2) of Schedule 3 to this Agreement, and the agreement or arrangements by which the proceeds of such loan to the Guarantor shall be relented by the Guarantor to the Borrower.

(d) "Valco" means Volta Aluminium Company Limited, a company organized and existing under the Companies Code of the Guarantor.

(e) "Smelter" means the aluminum smelter of Valco located adjacent to the port of Tema in Ghana.

(f) "Second Exim-Valco Loan Agreement" means the agreement to be entered into between Valco and the Export-Import Bank of the United States, an agency of the United States of America, providing for a loan in the amount of approximately \$10,500,000 for the expansion of the Smelter.

(g) "Barclays-Valco Loan Agreement" means the agreement to be entered into between Valco and Barclays Bank D.C.O. providing for a loan in the amount of approximately \$5,000,000 equivalent in currency of the Guarantor for the expansion of the Smelter.

(h) "Power operations" means the operations and activities of the Borrower which are related to the generation and transmission of electric power.

(i) "Non-power operations" means the operations and activities of the Borrower which are not related to the generation and transmission of electric power.

ARTICLE II**The Loan**

SECTION 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions in this Loan Agreement set forth or referred to, an amount in various currencies equivalent to six million dollars (\$6,000,000).

SECTION 2.02. (a) The Bank shall open a Loan Account on its books in the name of the Borrower and shall credit to such Account the amount of the Loan.

(b) The amount of the Loan may be withdrawn from the Loan Account as provided in, and subject to the rights of cancellation and suspension set forth in, this Loan Agreement and in accordance with the allocation of the proceeds of the Loan set forth in Schedule 1 to this Agreement, as such allocation shall be modified from time to time pursuant to the provisions of such Schedule or by further agreement between the Bank and the Borrower.

SECTION 2.03. The Borrower shall be entitled to withdraw from the Loan Account such amounts as shall have been paid (or, if the Bank shall so agree, shall be required to meet payments to be made) in respect of the reasonable cost of goods and services required for the Project and to be financed under this Loan Agreement.

SECTION 2.04. The Borrower shall pay to the Bank a commitment charge at the rate of three-fourths of one per cent ($\frac{3}{4}$ of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.

SECTION 2.05. The Borrower shall pay interest at the rate of six and one-half per cent ($6\frac{1}{2}\%$) per annum on the principal amount of the Loan withdrawn and outstanding from time to time.

SECTION 2.06. Interest and other charges shall be payable semi-annually on June 15 and December 15 in each year.

SECTION 2.07. The Borrower shall repay the principal of the Loan in accordance with the amortization schedule set forth in Schedule 2 to this Agreement.

ARTICLE III

Use of Proceeds of the Loan

SECTION 3.01. The Borrower shall apply the proceeds of the Loan in accordance with the provisions of this Loan Agreement to expenditures on the Project, described in Schedule 3 to this Agreement.

SECTION 3.02. Except as the Bank shall otherwise agree, (i) the goods and services to be financed out of the proceeds of the Loan shall be procured on the basis of international competitive bidding in accordance with the Guidelines for Procurement under World Bank Loans and IDA Credits, published by the Bank in February 1968, and in accordance with such other procedures supplementary thereto as are set forth in Schedule 4 to this Agreement, and (ii) contracts for the procurement of such goods and services shall be subject to the prior approval of the Bank.

SECTION 3.03. Except as the Bank shall otherwise agree, the Borrower shall cause all goods and services financed out of the proceeds of the Loan to be used exclusively in carrying out the Project.

ARTICLE IV

Bonds

SECTION 4.01. If and as the Bank shall from time to time request, the Borrower shall execute and deliver Bonds

representing the principal amount of the Loan as provided in Article VIII of the General Conditions.

SECTION 4.02. The Chief Executive of the Borrower and such other person or persons as he may appoint in writing are designated as authorized representatives of the Borrower for the purposes of Section 8.10 of the General Conditions.

ARTICLE V

Particular Covenants

SECTION 5.01. (a) The Borrower shall carry out the Project with due diligence and efficiency and in conformity with sound engineering, financial and public utility practices.

(b) Except as the Bank shall otherwise agree, in the carrying out of the Project, the Borrower shall:

(i) cause the study by consultants currently in progress of the Borrower's tariff structure, including their recommendations, to be completed by December 31, 1969;

(ii) engage consultants acceptable to the Bank and on terms and conditions satisfactory to the Bank:

(A) to provide services for the preparation of specifications and tender documents, analysis of tenders, design, contract and construction supervision, and commissioning for the generating units referred to in paragraph (1) of Schedule 3 of this Agreement and the substations and related facilities at Akosombo, Volta (Tema) and the Smelter referred to in paragraph (2) of such Schedule 3; and

(B) to review future expansion plans and make recommendations by December 31, 1971 as to the most economic development of the Borrower's generation capacity after completion of the Project; and

(iii) carry out a review, with the assistance of consultants if necessary, in a manner acceptable to the Bank and the Borrower,

(A) of the Borrower's operations, organizational structure and staffing policies by June 30, 1970; and

(B) of the Borrower's accounting system and practices by December 31, 1969,

and take such appropriate measures as may be indicated by the conclusions of such review.

(c) Except as the Bank shall otherwise agree, the Borrower shall, in the carrying out of the Project, employ competent and experienced contractors mutually acceptable to the Bank and the Borrower and on terms and conditions mutually satisfactory to the Bank and the Borrower.

SECTION 5.02. (a) The Borrower shall furnish to the Bank, promptly upon their preparation, the plans and specifications and the construction and installation schedules for the Project, and any material modifications subsequently made therein, in such detail as the Bank shall from time to time request.

(b) The Borrower shall maintain records adequate to identify the goods and services financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect in accordance with consistently maintained sound accounting practices the financial condition and operations of the Borrower.

(c) The Borrower shall enable the Bank's representatives to inspect the Project, the goods financed out of the proceeds of the Loan, all other plants, works, properties and equipment of the Borrower and any relevant records and documents.

(d) The Borrower shall furnish to the Bank all such information as the Bank shall reasonably request concern-

ing the expenditure of the proceeds of the Loan, the Project, the goods and services financed out of the proceeds of the Loan, the administration, operations and financial condition of the Borrower, its relations with Valco and the carrying out of the Borrower's rights and obligations under the documents specified in Section 5.11(a) of this Agreement and any other agreements related thereto.

(e) The Borrower shall have its financial statements (balance sheet and related statement of earnings and expenses) audited and certified annually by an independent accountant or accounting firm acceptable to the Bank and shall promptly after their preparation, and not later than six months after the close of the fiscal year to which they apply, transmit to the Bank certified copies of such statements and a signed copy of the accountant's or accounting firm's report.

SECTION 5.03. (a) The Bank and the Borrower shall cooperate fully to assure that the purposes of the Loan will be accomplished. To that end, the Bank and the Borrower shall from time to time, at the request of either party, exchange views through their representatives with regard to the performance by the Borrower of its obligations under the Loan Agreement, the administration, operations and financial condition of the Borrower and other matters relating to the purposes of the Loan.

(b) The Borrower shall promptly inform the Bank of any condition which interferes with, or threatens to interfere with, the accomplishment of the purposes of the Loan, the maintenance of the service thereof or the performance by the Borrower of its obligations under the Loan Agreement.

(c) The Borrower shall consult with the Bank regarding the naming of a Manager pursuant to the Voting Trust Arrangements and of a Referee pursuant to the Long Term Tolling Contracts.

SECTION 5.04. The Borrower undertakes that, except as the Bank shall otherwise agree, if any lien shall be created on any assets of the Borrower as security for any debt, such lien will *ipso facto* equally and ratably secure the payment of the principal of, and interest and other charges on, the Loan and the Bonds, and that in the creation of any such lien express provision will be made to that effect; provided, however, that the foregoing provisions of this Section shall not apply to: (i) any lien created on property, at the time of purchase thereof, solely as security for the payment of the purchase price of such property; or (ii) any lien arising in the ordinary course of banking transactions and securing a debt maturing not more than one year after its date.

SECTION 5.05. The Borrower shall pay or cause to be paid all taxes, if any, imposed under the laws of the Guarantor or laws in effect in the territories of the Guarantor on or in connection with the execution, issue, delivery or registration of this Loan Agreement, the Guarantee Agreement or the Bonds, or the payment of principal, interest or other charges thereunder; provided, however, that the provisions of this Section shall not apply to taxation of payments under any Bond to a holder thereof other than the Bank when such Bond is beneficially owned by an individual or corporate resident of the Guarantor.

SECTION 5.06. The Borrower shall pay or cause to be paid all taxes, if any, imposed under the laws of the country or countries in whose currency the Loan and the Bonds are payable or laws in effect in the territories of such country or countries on or in connection with the execution, issue, delivery or registration of this Loan Agreement, the Guarantee Agreement or the Bonds.

SECTION 5.07. (a) The Borrower shall take out and maintain with responsible insurers, or make other provision satisfactory to the Bank for, insurance against such risks

and in such amounts as shall be consistent with sound business practice.

(b) Without limiting the generality of the foregoing, the Borrower undertakes to insure the imported goods to be financed out of the proceeds of the Loan against marine, transit and other hazards incident to acquisition, transportation and delivery thereof to the place of use or installation and for such insurance any indemnity shall be payable in a currency freely usable by the Borrower to replace or repair such goods.

SECTION 5.08. The Borrower shall:

(i) operate and maintain its plants, equipment and property, and from time to time make all necessary renewals and repairs thereof, all in accordance with sound engineering standards;

(ii) except as the Bank shall otherwise agree, take all steps necessary to maintain and renew all rights, powers, privileges and franchises which are necessary or useful in the conduct of its business; and

(iii) at all times carry on its operations and maintain its financial position in accordance with sound business and public utility practices, and in that connection shall act in accordance with the requirements of the Volta River Development Act, 1961.

SECTION 5.09. (a) Except as the Bank and the Borrower shall otherwise agree, the Borrower shall take such reasonable action as may be required, including the adjustment from time to time of its rates for the supply of power, to provide revenues from the Borrower's power operations sufficient to produce, for the fiscal year of the Borrower ending December 31, 1974 and thereafter, an annual rate of return of not less than 8% on the Guarantor's investment in the Borrower.

(b) For the purposes of this Section :

(i) The annual rate of return shall be calculated by relating the net income for the Borrower's fiscal year in question to the average of the Guarantor's investment in the Borrower at the beginning and at the end of such fiscal year.

(ii) The term "Guarantor's investment in the Borrower" shall mean the book value of ;

(A) the Guarantor's capital contributions to the Borrower for the Borrower's electric power generation and transmission facilities and operations ; and

(B) cumulative earnings generated by and retained in the Borrower's power operations, increased by amounts corresponding to appropriate revaluations of the Borrower's electric power generation and transmission facilities, calculated in accordance with methods agreed with the Bank.

(iii) The term "net income" shall mean the difference between :

(A) gross operating revenues accruing from the Borrower's power operations ; and

(B) the operating and administration expenses related to such gross operating revenues, including taxes (if any), adequate maintenance, straight line depreciation at rates satisfactory to the Bank and interest and other charges on debt.

SECTION 5.10. (a) The Borrower shall have at all times qualified and experienced management and staff.

(b) The Borrower shall obtain the approval of the Bank to any proposed appointment to the position of Chief Executive of the Borrower prior to the making of such appointment.

SECTION 5.11. (a) Except as the Bank and the Borrower shall otherwise agree, the Borrower shall, to the extent that it has an interest therein and is obligated or entitled

to do so, take all such reasonable action as may be necessary to maintain in full force and effect, and to secure the prompt and diligent performance by the parties thereto of, the Scheduled Documents, the Subscription Agreement, the Long Term Tolling Contracts, the Valco Current Accounts Trust, the Voting Trust Arrangements and the managing agreement relating thereto, the AID Loan Agreement, the Exim-Authority Loan Agreement, the UK Loan Agreement and the Canadian Loan Arrangements.

(b) The Bank and the Borrower shall exchange views as to any arbitration or any proceeding before the Referee contemplated or undertaken pursuant to any of the documents specified in paragraph (a) of this Section. The Borrower shall promptly advise the Bank of any such arbitration or other proceeding contemplated or undertaken and shall give the Bank such information as the Bank shall reasonably request to enable the Bank if it so desires to make its views thereon known to the Borrower and in any such arbitration or other proceeding.

SECTION 5.12. Except as the Bank and the Borrower shall otherwise agree, the Borrower shall not (a) rescind or terminate the Power Contract or (b) enter into an agreement to sell power or energy from the Project so as to effect a reduction of the Contract Rate (as that term is defined in the Power Contract) under Article 25 of the Power Contract.

SECTION 5.13. Except as the Bank and the Borrower shall otherwise agree, if the Borrower shall repay in advance of maturity any part of its indebtedness under the AID Loan Agreement, the Exim-Authority Loan Agreement, the UK Loan Agreement or the Canadian Loan Arrangements, the Borrower shall simultaneously repay a proportionate amount of the Loan then outstanding. All the provisions of the General Conditions relating to repayment in advance of maturity shall be applicable to any repayment by the Borrower in accordance with this Section.

SECTION 5.14. Except as the Bank and the Borrower shall otherwise agree, the Borrower shall not incur debt unless its net revenues for the fiscal year next preceding such incurrence or for a later twelve-month period ended prior to such incurrence, whichever is the greater, shall be not less than 1.5 times the maximum debt service requirement for any succeeding fiscal year on all debt, including the debt to be incurred. For the purposes of this Section:

(a) the term "debt" shall mean all debt of the Borrower maturing by its terms more than one year after the date on which it is originally incurred;

(b) debt shall be deemed to be incurred on the date of execution and delivery of a contract or agreement providing for such debt;

(c) the term "net revenues" shall mean gross revenues from all sources, adjusted to take account of power rates in effect at the time of the incurrence of debt even though they were not in effect during the fiscal year or twelve-month period to which such revenues relate, less all operating and administrative expenses, including provision for taxes, if any, but before provision covering depreciation, interest and other charges on debt;

(d) the term "debt service requirement" shall mean the aggregate amount of amortization (including sinking fund payments, if any), interest and other charges on debt; and

(e) debt service payable in a currency other than currency of the Guarantor shall be valued at the rate of exchange at which such other currency is obtainable, on the date the additional debt is incurred, for the purpose of servicing such debt, or, if such currency is not so obtainable, at the rate of exchange as reasonably determined by the Bank.

SECTION 5.15. In the carrying out or expansion of its non-power operations, the Borrower shall continue to ensure that:

- (i) the cost, both capital and recurrent, of the non-power operations is financed without resort to the revenues of the Borrower from its power operations;
- (ii) the organization and the staff of the Borrower are adequate to enable the Borrower to engage in its non-power operations without detriment to the efficient conduct of its power operations; and
- (iii) under the Borrower's accounting system the accounts for each of its non-power operations are maintained separately from those for its power operations and from each of its other non-power operations.

The Borrower shall consult the Bank about arrangements which it proposes from time to time with respect to the matters specified in clauses (ii) and (iii) of this Section sufficiently in advance of the execution of such proposed arrangements for the Bank to have reasonable opportunity to express its views thereon.

ARTICLE VI

Remedies of the Bank

SECTION 6.01. If any event specified in Section 7.01 of the General Conditions or in Section 6.02 of this Agreement shall occur and shall continue for the period, if any, therein set forth, then at any subsequent time during the continuance thereof the Bank, at its option, may by notice to the Borrower and the Guarantor declare the principal of the Loan and of all the Bonds then outstanding to be due and payable immediately, together with the interest and other charges thereon, and upon any such declaration such principal, interest and charges shall become due and payable immediately, anything to the contrary in this Loan Agreement or in the Bonds notwithstanding.

SECTION 6.02. For the purposes of Section 7.01 of the General Conditions, the following additional events are specified:

(a) Any other loan or credit to the Borrower for money borrowed shall have become due and payable pursuant to the terms thereof prior to its stated maturity.

(b) Any Event of Release as determined pursuant to the Subscription Agreement or the Long Term Tolling Contracts shall have occurred, or any other event shall have occurred which, due to the fault of the Borrower or the Guarantor, shall have operated to release any of the parties thereto from the said agreements or from the Voting Trust Arrangements or the Valco Current Accounts Trust or to modify substantially the obligations of the parties thereunder.

(c) The Volta River Development Act, 1961, of the Guarantor or any provision thereof shall have been amended, suspended, terminated or repealed without the prior approval of the Bank, and such event shall continue for a period of sixty days after notice thereof shall have been given by the Bank to the Borrower and the Guarantor.

(d) The AID Loan Agreement, the Exim-Authority Loan Agreement, the UK Loan Agreement, the Canadian Loan Arrangements, the Master Agreement, the Power Contract, the Subscription Agreement, the Long Term Tolling Contracts, the Voting Trust Arrangements or the managing agreement relating thereto or the Valco Current Accounts Trust shall have been, in any material respect, amended, terminated, assigned or waived without the agreement of the Bank, and such event shall continue for a period of sixty days after notice thereof shall have been given by the Bank to the Borrower and the Guarantor.

(e) The Guarantor shall have taken any action which would prevent, or materially interfere with, the performance by the Borrower of its obligations or the assertion

of its rights under the AID Loan Agreement, the Exim-Authority Loan Agreement, the UK Loan Agreement, the Canadian Loan Arrangements, the Subscription Agreement, the Long Term Tolling Contracts, the Voting Trust Arrangements or the managing agreement relating thereto or the Valco Current Accounts Trust, and such event shall continue for a period of sixty days after notice thereof shall have been given by the Bank to the Borrower and the Guarantor.

(f) The Exim-Valco Loan Agreement, the Second Exim-Valco Loan Agreement or the Barclays-Valco Loan Agreement shall have been amended, terminated, assigned or waived or any of the loans provided for thereunder shall have been cancelled or prematured, in whole or in part, so as materially and adversely to affect the ability of the Borrower to carry out the Project or to pay amounts due under the Loan or the Bonds, and such event shall continue for a period of sixty days after notice thereof shall have been given by the Bank to the Borrower and the Guarantor.

SECTION 6.03. For the purposes of Section 6.02 of the General Conditions, the following additional events are specified:

(a) Any Event of Suspension as defined in the Subscription Agreement or the Long Term Tolling Contracts shall have occurred, or any other event shall have occurred which, due to the fault of the Borrower or the Guarantor, shall have operated to suspend the rights or obligations of any of the parties thereto under any of the said agreements or under the Voting Trust Arrangements or the Valco Current Accounts Trust.

(b) Any event shall have occurred which shall have operated to suspend the right of the Borrower to withdraw amounts under the AID Loan Agreement or the Canadian Loan Arrangements.

SECTION 6.04. Notwithstanding Section 6.03 of the General Conditions, the Bank may by notice to the Borrower cancel an amount of the Loan in respect of which the right of the Borrower to make withdrawals from the Loan Account shall have been suspended because of the occurrence of an event specified in paragraph (a) of Section 6.03 of this Agreement only after any such suspension shall have continued for one year.

ARTICLE VII

Effective Date; Termination

SECTION 7.01. The following events are specified as additional conditions to the effectiveness of this Loan Agreement within the meaning of Section 11.01(c) of the General Conditions:

(a) The Borrower shall have engaged, on terms and conditions satisfactory to the Bank, engineering consultants or experts acceptable to the Bank, as provided in Section 5.01(b)(ii)(A) of this Agreement, and shall have made arrangements satisfactory to the Bank for the financing of the cost of such engineering consultants or experts.

(b) The Canadian Loan Arrangements shall have been entered into in form and substance satisfactory to the Bank and shall have come into force and effect.

(c) Valco shall have made arrangements satisfactory to the Bank for the financing of the expansion of the Smelter and the operation of such expanded Smelter so as to enable Valco to meet its obligations under the Power Contract, such arrangements to include, without limitation, amendments satisfactory to the Bank of the Long Term Tolling Contracts and the Valco Current Accounts Trust.

SECTION 7.02. The date of October 1, 1969, is specified for the purposes of Section 11.04 of the General Conditions.

ARTICLE VIII

Miscellaneous

SECTION 8.01. The Closing Date shall be December 31, 1973, or such other date as shall be agreed between the Bank and the Borrower.

SECTION 8.02. The following addresses are specified for the purposes of Section 10.01 of the General Conditions:

For the Bank:

International Bank for
Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Alternative address for cables:

Intbafrad
Washington, D.C.

For the Borrower:

Volta River Authority
P. O. Box M 77
Accra, Ghana

Alternative address for cables:

Volta
Accra

IN WITNESS WHEREOF, the parties hereto, acting through their representatives thereunto duly authorized, have caused this Loan Agreement to be signed in their respective names and to be delivered in the District of Columbia,

United States of America, as of the day and year first above written.

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

By /s/ J. BURKE KNAPP
Vice President

VOLTA RIVER AUTHORITY

By /s/ E. L. QUARTEY
Authorized Representative

The Common Seal of the Volta River Authority was hereunto affixed pursuant to a resolution of the Authority passed and dated the 18th day of April one thousand nine hundred and sixty-nine in the presence of

(Seal)

/s/ E. L. QUARTEY
Chief Executive

/s/ E. Y. M. DZEBLE
Secretary

SCHEDULE 1**Allocation of Proceeds of Loan**

Category	Amounts Expressed in Dollar Equivalent
A. Turbines, governors, auxiliary equipment, and civil works connected with the power plant expansion	3,100,000
B. Substation equipment including switch- gear, transformers, auxiliary equipment, a transmission line connecting the Volta and Smelter substations, and related civil works	1,550,000
C. Construction and service vehicles	150,000
D. Consulting and training services	350,000
E. Miscellaneous works as in paragraph (4) of Schedule 3 to this Agreement	300,000
F. Unallocated	<u>550,000</u>
Total	<u><u>6,000,000</u></u>

Reallocation Upon Change in Cost Estimates

1. If the estimate of the cost of the items included in any of the Categories A to E shall decrease, the amount of the Loan then allocated to, and no longer required for, such Category will be reallocated by the Bank to Category F.
2. If the estimate of the cost of the items included in any of the Categories A to E shall increase, an amount equal to the portion, if any, of such increase to be financed out of the proceeds of the Loan will be allocated by the Bank, at the request of the Borrower, to such Category from Category F, subject, however, to the requirements for contingencies, as determined by the Bank, in respect of the cost of the items in the other Categories.

SCHEDULE 2
Amortization Schedule

Date Payment Due	Payment of Principal (expressed in dollars) *
June 15, 1979	115,000
December 15, 1979	120,000
June 15, 1980	125,000
December 15, 1980	125,000
June 15, 1981	130,000
December 15, 1981	135,000
June 15, 1982	140,000
December 15, 1982	145,000
June 15, 1983	150,000
December 15, 1983	155,000
June 15, 1984	160,000
December 15, 1984	165,000
June 15, 1985	170,000
December 15, 1985	175,000
June 15, 1986	180,000
December 15, 1986	185,000
June 15, 1987	190,000
December 15, 1987	200,000
June 15, 1988	205,000
December 15, 1988	210,000
June 15, 1989	220,000
December 15, 1989	225,000
June 15, 1990	230,000
December 15, 1990	240,000
June 15, 1991	250,000
December 15, 1991	255,000
June 15, 1992	265,000
December 15, 1992	275,000
June 15, 1993	280,000
December 15, 1993	290,000
June 15, 1994	290,000

* To the extent that any portion of the Loan is repayable in a currency other than dollars (see General Conditions, Section 4.02), the figures in this column represent dollar equivalents determined as for purposes of withdrawal.

Premiums on Prepayment and Redemption

The following percentages are specified as the premiums payable on repayment in advance of maturity of any part of the principal amount of the Loan pursuant to Section 3.05(b) of the General Conditions or on the redemption of any Bond prior to its maturity pursuant to Section 8.15 of the General Conditions.

<i>Time of Prepayment or Redemption</i>	<i>Premium</i>
Not more than three years before maturity	1/2%
More than three years but not more than six years before maturity	1 1/4%
More than six years but not more than eleven years before maturity	2 1/4%
More than eleven years but not more than sixteen years before maturity	3 3/4%
More than sixteen years but not more than twenty-one years before maturity	5%
More than twenty-one years but not more than twenty-three years before maturity	6%
More than twenty-three years before maturity	6 1/2%

SCHEDULE 3**Description of the Project**

The Project forms the major part of the Borrower's program for 1968-1972 to expand its electric power and transmission facilities and includes:

(1) The installation at the Akosombo power station of two additional generating units, each with a nominal rating of not less than 128 MW and a maximum continuous rating of not less than 147 MW, together with all auxiliary equipment;

(2) The expansion of 165 kv substations and related facilities at Akosombo, Volta (Tema) and the Smelter and of other 165 kv substation facilities at Volta (Tema), Sekondi-Takoradi and Kumasi;

(3) Acquisition of construction and service vehicles required for maintenance of the Borrower's 165 kv transmission system;

(4) Miscellaneous works to improve the Borrower's generating and transmission facilities;

(5) The improvement of the Borrower's operations and accounting system; and

(6) The study of the Borrower's future expansion program.

The Project is expected to be completed during 1972.

SCHEDULE 4**Supplementary Procedures for Procurement of Goods
to be Financed out of the Proceeds of the Loan**

1. With respect to contracts for procurement of such goods estimated to cost in excess of \$50,000 equivalent:

(a) Invitations to bid, specifications, conditions of contract, all other tender documents and the method and places of advertising will be submitted to the Bank for its review and approval prior to the issuance of invitations to bid.

(b) After bids have been received and analyzed, the analysis of the bids, and the proposals for awards, together with the reasons for such proposals, will be submitted to the Bank for its review and approval prior to the Borrower's making any award of contract or issuing any letter of intent.

(c) If the final contract is to differ substantially from the terms and conditions contained in the respective documents approved by the Bank under paragraphs (a) and (b) above, the text of the proposed changes will be submitted to the Bank for its review and approval prior to the execution of such contract.

(d) As soon as a letter of intent has been issued or a contract has been executed, a copy thereof will be sent to the Bank.

2. Notwithstanding the provisions of Section 3.02(ii) of this Agreement, with respect to contracts for procurement of such goods estimated to cost \$50,000 equivalent or less, copies of all documents, including the invitation to bid, the tender documents and the bid analysis and evaluation, shall be sent to the Bank promptly after the execution of any such contract and prior to the submission to the Bank of the first application for withdrawal from the Loan Account in respect of such contract.





December 8, 1970

Mr. J. K. Taylor
 Manager
 Washington Office
 Henry J. Kaiser Company
 Suite 1000
 900 17th Street, N.W.
 Washington, D.C. 20006

Dear Mr. Taylor:

Re: Loan 618-GH
 Volta River Authority (VRA)
Akosombo Expansion

Thank you for your letter of December 3, 1970 with which you sent us copies of the following Contract Documents:

XS-1	Supply of Equipment for Volta and Smelter Substations
XS-2	Installation of Substation Equipment and Vols. I and II Transmission Line
XA-3M	Power Plant - Installation of Mechanical Vols. I and II Equipment

Yours sincerely,



Gavin E. Wyatt
 Chief, Power Division II
 Public Utilities Projects Department

W EAMinnig:dd
 IBRD/IDA

cc: Messrs. Wyatt
 von Busse
 Memon
 Central Files
 Division Files (GH-O-208)

Mr. Manning
618 GA

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

(Suite 1000, 900 Seventeenth Street N.W., Washington D.C. 20006)

December 3, 1970.

Mr. Gavin Wyatt
Chief, Power Division II
Public Utilities Projects Department
International Bank for Reconstruction
and Development
1818 H Street N.W.
Washington D.C. 20433

Date Rec'd. Dec. 7/70

Date Ack'd. Dec 8/70

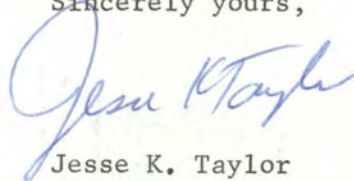
Assigned to Wyatt

Dear Mr. Wyatt:

The Volta River Authority has asked me to forward to you
two copies of Contracts XS-1, XS-2 and XA-3M.

6H-0-208

Sincerely yours,



Jesse K. Taylor
Manager
Washington Office.

encl.

1 copy of Files
1 copy Mr. v. June (Contractors)

Mr. James J. Fish

November 27, 1970

Ali N. Memon

GHANA - Loan 618-GH
Volta River Authority (VRA)
Operating Results for First Quarter 1970

1. In January 1970, VRA increased its tariff to the Electricity Corporation of Ghana (ECG) from N¢ 2.75 per month per kW of maximum demand plus N¢ 0.00183 per kWh to N¢ 3.00 per month per kW of maximum demand plus N¢ 0.002 per kWh. VRA reports that it proposes to increase the tariff of the other customers when the agreements are up for renewal.

2. Revenue from power sales for the first quarter increased from N¢ 2.52 million in 1969 to N¢ 2.77 million in 1970. The increase was due to the tariff increase for ECG and normal load growth. Operating expenses increased from N¢ 1.29 million to N¢ 1.33 million during the same period. The rate of return on the Government's investment for the first quarter improved from approximately 0.8% to 1.2%. The return on the yearly basis will amount to approximately 4.8% as compared to 2.3% achieved last year. The target return is 8% by 1974.

3. Accounts receivable remain at a satisfactory level. On the whole, VRA's operations for the first quarter of 1970 were satisfactory.

4. It is recommended that the next supervision mission should obtain details about proposed tariff increases referred to in paragraph 1. The mission should also discuss the possibility of expediting the preparation of quarterly and yearly financial statements by VRA.

AM
ANMemon:dd
IBRD/IDA

cc: Messrs. Nissenbaum
Wyatt
Minnig
Central Files
Division Files

November 25, 1970

Mr. E. L. Quartey
Chief Executive,
Volta River Authority
P.O. Box M.77
Accra, Ghana

Dear Mr. Quartey:

Re: Loan 618-GH
Short Term Loan

Thank you for your letter of October 8, 1970. With regards to N\$300,000 loan from the Government, please be advised that we have no objection to the proposed terms - 5 years including 2 year grace period and bearing interest at 6%.

Yours sincerely,



for Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

AM

ANMemon:jmca
IBRD

Cleared with and cc: Mr. Minnig & Mr. Nissenbaum

cc: Mr. Wyatt
~~Mr. Nissenbaum~~
Mr. Memon
Central Files
Division Files

Control No.: GH-0-183

November 25, 1970

Dear Dr. Ramaer:

I am writing in reply to your letter of November 12, 1970. At the time of the Annual Meeting in Copenhagen various leftist groups combined to put out a publication on the World Bank which, among other things, criticized the Volta River Project. Last month I gave some talks in the Netherlands and since I expected that the project in question might be brought up I asked for some background material on the project, with which, incidentally, I was very familiar at the time it was being negotiated, i.e. in the early sixties. I am sending you these background papers for your information. The contents of the papers are not confidential but they should not be attributed to the Bank.

I must say that the story you heard from the students is not only one-sided but completely wrong. The World Bank loan was for a power plant. There was never a question of Ghana selling aluminium to anyone for the simple reason that Ghana does not produce aluminium. The contract in which the World Bank was interested was the contract by which Ghana sold power to the private aluminium smelters. Since the power contract was the real security for repayment of the Bank's loan, you can well understand that our interest was in seeing Ghana obtain the highest possible price for power. Because Ghana was not in a very strong negotiating position, the price they accepted was lower than we would have liked to see it. On the other hand, the aluminium smelting company obligated itself to pay for the power whether it actually used it or not, so that Ghana had a guaranteed minimum income from the power plant to which would be added income from sale of electricity in excess of the quantity reserved for the aluminium smelter.

I have discussed the particular problems which so-called enclave projects pose for the Bank in a recent talk at The Southwestern Legal Foundation. I am sending you a copy herewith.

With best regards,

Sincerely yours,
(Signed) A. Broches

A. Broches
General Counsel

Dr. J. C. Ramaer
N.V. Philips
Eindhoven, The Netherlands

ABroches:cml
Enclosures

November 13, 1970

Mr. R. A. Lowell
Kaiser Engineers International, Inc.
Kaiser Center
300 Lakeside Drive
Oakland, California 94604

Dear Mr. Lowell:

Re: Loan 618-GH - Volta River Authority
Future Power Expansion Study


Thank you for your letter dated October 13, 1970 with which you sent us copies of the proposed agreement between VRA and Kaiser Engineers International, Inc. covering consulting services for the evaluation of alternative means to meet the Authority's future power requirements. Please find attached a copy of our cable of November 12, 1970 to Mr. Quartey on the above subject.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Attachment

 EAMinnig:dd
IBRD/IDA

cc: Messrs. von Busse (Controller's) (with incoming)
Nissenbaum
Wyatt
Memon
Central Files
Division Files (GH-O-185)

GH-618

OUTGOING WIRE

TO: VOLTA
ACCRA

DATE: NOVEMBER 12, 1970

CLASS OF
SERVICE: LT

Re.

COUNTRY: GHANA

TEXT:

Cable No.: ATTENTION QUARTEY NO OBJECTION TO CONTRACT WITH KAISER FUTURE EXPANSION
STUDY REGARDS

WYATT

INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt
Chief, Power Division II
DEPT. Public Utilities Projects

SIGNATURE *G. E. Wyatt*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE

CLEARANCES AND COPY DISTRIBUTION:

cc: Kaiser Engineers Int. Inc.
Messrs. von Busse (Controller's) with
Ram incoming

Wyatt
Memon
Central Files
Division Files (GH-0-196)
EAM:mig:dd
IBRD/IDA

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: */*

ORIGINAL (MIR COPY)

DISPATCHED

REFERENCE

SIGNATURE OF INDIVIDUAL AUTHORIZED TO SIGN

SIGNATURE

DATE

NAME

APPROVED BY

WALTER RUTENFRANZ
CHIEF, POLICE DEPARTMENT II
SEATTLE W. WASH

Nov 12 6 32 PM 1970

COMMUNICATIONS SECTION

RECEIVED BY: [unclear]
RECEIVED BY: [unclear] (OH-O-100)
RECEIVED BY: [unclear]
RECEIVED BY: [unclear]

RECEIVED BY: [unclear] (COMMUNICATIONS SECTION)
cc: [unclear] [unclear] [unclear]
SEATTLE WASH
COMMUNICATIONS SECTION

NOT TO BE RECLASSIFIED

UNCLASSIFIED

DATE

CLASSIFICATION

CLASSIFICATION NUMBER NO OBJECTION TO SERVICE WITH KNOWN SOURCE INFORMATION

CLASSIFICATION

SERVICE IN

CLASS OF

CLASSIFICATION

DATE

DATE NOVEMBER 12, 1970

OUTGOING MIBS

ASSOCIATION INTERNATIONAL DEVELOPMENT (19-0) FORM 10-63	REGISTRATION AND DEPARTMENT INTERNATIONAL BANK FOR	CORPORATION INTERNATIONAL FINANCE
--	---	--------------------------------------

11-12-70

618 GH
Wyatt
Ghana
Turkey

INCOMING CABLE

DATE AND TIME OF CABLE: **NOVEMBER 11, 1970** **1030**

LOG NO.: **WU 34 / 11**
TO: **WYATT INTBAFRAD**
FROM: **ACCRA**

ROUTING	
ACTION COPY:	P U POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

RE GH618 FUTURE EXPANSION STUDY AGREEMENT PLEASE ADVISE EARLY IF KAISER DRAFT NOW ACCEPTABLE. REGARDS.

SACKEY VOLTA

Date Rec'd. Nov. 12/70
Date Ack'd. CRV. 12/70
Assigned to Wyatt

JAO

GH-0-196.

Nov 11 1 51 PM 1970
COMMUNICATIONS

TYPED

TO: [Faint text]
FROM: [Faint text]
SUBJECT: [Faint text]

SECRET

[Faint header text]

[Faint header text]

DATE

TIME

TO

FROM

OR SUBJECT

DATE	TIME	TO	FROM

TELETYPE UNIT

COMMUNICATIONS SECTION
U.S. AIR FORCE
COMMUNICATIONS CENTER
WRIGHT PATTENSON AIR FORCE BASE
DAYTON, OHIO 45433

61864

Mr. M. S. Ram

October 27, 1970

Gavin E. Wyatt



Ghana - Loan 618GH - Extension Volta River Power Station Disbursements.

In response to your query I attach a memo from Mr. Ranganathan showing the current position with regard to disbursements under Loan 618GH.

Since all the contracts being financed by the Bank are for equipment and its installation no disbursements other than the two down payments already made can be expected until the equipment is ready for delivery which may be several months more for the large items.

GEWyatt:sst
IBRD

cc: Mr. Minnig

Central Files
Division Files

OFFICE MEMORANDUM 61867

TO: Mr. G. E. Wyatt

DATE: October 26, 1970

FROM: C. P. Ranganathan

SUBJECT: Disbursement against Loan 618-GHContracts financed out of Bank Loan:

The Bank Loan of N \o 6,218,000 will be utilized for disbursement against the following contracts.

- (1) XA-4 Supply of Turbines and Governors.
- (2) XA-6 Supply of Intake Gate hoists and trash rack panels.
- (3) XS-1 Supply of Substation Equipment.
- (4) XA-3M Installation of Turbines and Governors.
- (5) XA-3E Installation of Generators. Transformers and Circuit breakers, etc.
- (6) XS-2 Installation of Substation Equipment.

Contracts cleared by us:

- (1) XA-4 To Hitachi, Japan, for Yen 768,813,000; cleared by our cable of 2/19/1970.
- (2) XA-6 To Newton Chambers Engineering Ltd. U.K. for £ 48,689.50; cleared by our cable of 3/11/1970.
- (3) XA-3M To Sadelmi, Italy, for N \o 2,395,380; cleared by our cable of 3/23/1970
- (4) XS-1 & XS-2 To Sadelmi and GEI, for Italian lira 372,776,687.50 plus N \o 492,215; cleared by our cable of 3/23/1970.

Disbursement:

Our Controller's Department has not yet received any of the above contracts; but it has made the following disbursements:

- (1) Hitachi: Advance payment of US\$100,000.- of which US\$96,000.- are met from the earlier Loan 310 GH
- (2) Newton Chambers:
Advance payment of £ 2,400.-

Mr. Gavin E. Wyatt

October 15, 1970

A. E. Bailey

GHANA - Loan 618-GH

Power Study Future Expansion

Draft Contract Kaiser Engineers International Inc.

1. Mr. J. K. Taylor of Kaiser Industries visited the Bank on Tuesday October 13, 1970 to discuss the extension of the above study to include a review of existing and expandable hydroelectric and thermal generating facilities in Nigeria, including the Jebba, Shiroro Gorge and Benue Projects. The instruction from the Volta River Authority was to include the power potential of Nigeria in the wider scope of the assignment for use as background information by the VRA to enable it to enter into meaningful negotiations with Nigeria if the final recommendation should indicate an interconnection with that country.

2. Mr. Taylor questioned the opinion expressed by the Bank and VRA that the inclusion of the additional work will in no way greatly influence the cost of the study. His opinion was that if Kaiser's investigations in Nigeria have to be extended beyond existing facilities and planned extensions to 1980, this would substantially increase the scope and costs of the study.

3. I pointed out that a great deal of work had already been carried out by the consultants to the Niger Dams Authority on the future development program, particularly on the timing for the future development of the Nigeria Dams Project to its full capacity of 960 MW, and sufficient information should be available to enable Kaiser to enlarge the scope of the study as requested by VRA without substantially increasing the cost. Mr. Taylor noted this information and at the same time said Kaiser had already advised VRA of its proposal that only existing and expandable plants in Nigeria should be reviewed and annual costs brought to a common base with estimates for the Ghanaian projects to enable proper comparisons of production costs. This is covered in the latest draft of their agreement with VRA on which they are still awaiting VRA's comments.

4. I said that we would reserve our comments until we had an opportunity to examine this draft, and Mr. Taylor promised to send a copy within the next day or so.

AE AEBailey:dd
IBRD/IDA

cc: Mr. Mimmig
Central Files
Division Files

61864

OUTGOING WIRE

TO: QUARTEY
VOLTA

DATE: OCTOBER 14, 1970

CLASS OF
SERVICE: LT

COUNTRY: GHANA

Ru

TEXT:
Cable No.:

REYUCAB OF THIRTEENTH LATEST DRAFT AGREEMENT FUTURE POWER REQUIREMENTS
NOT YET RECEIVED IN BANK STOP WE WILL ADVISE OUR COMMENTS WHEN THIS
BECOMES AVAILABLE

WYATT
INTBAFRAD

NOT TO BE TRANSMITTED:

This is in response to VRA's request for confirmation
of receipt of revised agreement with Kaiser Engineering.
We have not received it.

NOT TO BE TRANSMITTED

AUTHORIZED BY: Mr. F. H. Howell, Deputy Director

NAME

DEPT. Public Utilities Projects Dept.

SIGNATURE *F. H. Howell*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

CLEARANCES AND COPY DISTRIBUTION:

cc: Central Files
Division Files
Control No. GH-0-182

AB Bailey: sst
IBRD

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: *7*

ORIGINATOR (BY CODE)

Checked for delivery

REFERENCE

DISPATCHED

FOR USE BY COMMUNICATIONS SECTION

SIGNATURE

SIGNATURE OF INDIVIDUAL AUTHORIZED TO SIGN

IBRD

Handwritten signature

DATE

10:06 AM OCT 14 5 35 PM 1970

COMPTON INC. ON-0-185

DIAGNOSTIC UNIT

TYPE

COMMUNICATIONS

cc: COMPTON UNIT

TRANSMITTED BY MR. E. H. HONEY, DEPT. DIRECTOR

STANDARD AND COMMUNICATIONS

NOT TO BE REVERSE FILED

REVERSE NOT RECEIVED...
of receipt of related agreement with related...
this is in response to... a request for confirmation

NOT TO BE REVERSE FILED

RECEIVED
OCT 14

REVERSE VARIATION

NOT REVERSE FILED IN BANK...
BECAUSE OF...
SOME REQUIREMENTS

DATE
1970

COMPTON UNIT

SERVICE PL
CLASS OF

TO: COMPTON

DATE OCTOBER 14, 1970

ORIGINATOR NAME

ASSOCIATION INTERNATIONAL DEVELOPMENT BANK	RECONSTRUCTION AND DEVELOPMENT INTERNATIONAL BANK FOR	COOPERATION INTERNATIONAL FINANCE
--	--	--------------------------------------

618 911



No object
converting existing
grant into loan

Your Ref 231/6610

October 14, 1970

Chief Executive
Volta River Authority
P.O. Box M77
Accra
GHANA

Attention: Mr. E. L. Quartey

Re: Short Term Loan

Dear Mr. Quartey:

We acknowledge receipt of your letter dated October 8, 1970 concerning the above subject. Your request is presently being considered and this will be the subject of a further communication in our course.

Yours sincerely,

for Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

AEBailey:ss
IBRD

cc: Mr. G. E. Wyatt
Mr. E. Minnig (w/incoming for action)
✓ Mr. Memon

Central Files
Division Files (GH-O-183)

618614

October 14, 1970

Kaiser Engineers
Kaiser Center
300 Lakeside Drive
Oakland, California 94604

Re: Volta River Authority, Ghana
Future Power Requirements

Dear Sirs:

We thank you for your letter dated October 9, 1970 concerning the above subject, and acknowledge receipt of the list of resumes of the personnel you are planning to assign to this study.

Sincerely yours,

for Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

AE
AEBailey:sst
IBRD

cc: Mr. G. E. Wyatt
Mr. E. Minnig (w/incoming)

Central Files
Division Files (GH-O-181)

61864

KAISER ENGINEERS INTERNATIONAL, INC.

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604 · CABLE KAISENGS

October 13, 1970

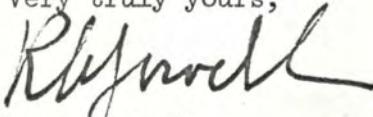
Mr. Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department
International Bank for Reconstruction and Development
1818 H Street, N. W.
Washington, D. C. 20433

Dear Mr. Wyatt:

In accordance with cable instructions received this morning from Mr. E. L. Quartey, Chief Executive of the Volta River Authority, I am pleased to forward herewith two copies of the proposed agreement between the VRA and Kaiser Engineers International, Inc., covering consulting services for the evaluation of alternative means to meet the Authority's future power requirements.

This proposed agreement has been executed by Kaiser Engineers and was forwarded to Mr. Quartey on October 2.

Very truly yours,



R. A. Lowell,
Project Manager

RAL:ds

Enc.

cc: Mr. E. L. Quartey

Original to: P.U. Proj.
Date: 10-15-70 Communications Section

61864

Mr. Thomas A. Blinkhorn

October 9, 1970

Gavin E. Wyatt *TW*

GHANA - Volta Dam Project

With reference to the attached copy of the Danish students' "World Bank Report", I give below comments on the statements regarding the Volta Dam Project which I hope will provide Mr. Broches with all the ammunition he needs to deal with questions. All the information has been extracted from the Bank's feasibility reports on the Project and the published reports of the Volta River Authority (VRA), which was set up to operate the facilities.

General

The document alleges that the benefits to Ghana of the Project are negative but the facts are the reverse. The original appraisal indicated that the Project should show a return over its estimated 50-year life of 8-9% on the Ghana Government's investment. As is not unusual with a Project on this scale, it was not expected that this figure would be achieved in the early years but the Project is already operating profitably and, according to the latest forecast, is expected to yield a return to the Government of over 9% by 1974, compared with the original target for that year of 8%. In addition, there are other financial benefits to Ghana not included in the above calculation, such as the income taxes to which the aluminum company becomes liable after its initial ten years of operation.

Specific Comments

Para. 1

The estimated cost of the Volta Project was about \$163 million. The Bank loan was for \$47 million, repayable at 5-3/4% interest over 25 years, with a 6-year grace period. U.S. agencies and the U.K. provided about \$31 million and the Ghana Government the balance, mainly as equity in VRA.

The estimated cost of port works at Tema attributable to the Project was about \$8 million (not \$80 million).

It is not bauxite which is imported for processing at the smelter, but alumina.

Para. 3

Debt service including repayments on the Project in the current year is estimated at about US\$7 million but this will level out at about US\$6 million from 1973 onwards. The Bank share is about \$4 million.

Revenue from the sale of electricity in 1969 was the equivalent of about US\$10.3 million. The smelter accounted for 74% of units sold and 50% of the revenue. Sales to other consumers have been rising rapidly, however, and are expected to account for some 40% of a much higher total volume of sales from VRA by 1977.

The implication that the Project does not cater for domestic demand is, therefore, wrong. In fact it included provision for a transmission network to supply the main towns and villages and the existing mines of southern Ghana. VRA at present supplies over 95% of the electricity distributed to retail customers by the Electricity Corporation of Ghana.

There is no justification for the statement that the Project "will be operating at a loss for years to come". In the initial years of a large Project such as this an operating deficit is not unusual but its profitability has to be judged on its expected lifetime performance. The original calculations showed that, on conservative assumptions, the Ghana Government could expect a return of 8-9% on its investment in the Project over the estimated life of 50 years. This is a reasonable return bearing in mind the guaranteed market for the bulk of the Project's output through the long-term contract with the smelter company, under which they are committed to "take or pay for" specified minimum quantities.

Moreover, these calculations do not allow for the extra financial benefits to Ghana, such as the income taxes to which the aluminum company becomes liable after its first 10 years of operations. These additional benefits cannot be calculated with any precision but they would raise the return of the Project to Ghana above the calculated 8-9%.

VRA is not operating at a loss; it made a profit of about US\$1.5 million in 1969, representing a return on the Government's investment of 2.3%, and the trend is steadily upwards. Under the Bank's loan agreement, VRA is required to achieve a minimum return of 8% on the Government's investment by 1974; according to the latest forecast, it is now expected to exceed 9% by that year.

It is true that Ghana has its own bauxite resources but the use of imported alumina, by reducing the amount of finance required, was a factor in making the Project possible. Moreover, the use of local bauxite at a later stage, as the output of the smelter expands, has always been envisaged. We understand that the Ghana Government and Kaiser are currently discussing the possibility of using local bauxite, now that the smelter project is well established.

October 9, 1970

Since the Volta facilities have only been in operation since late 1965, it is premature to criticize the Project for its alleged lack of stimulus to other industrial development to date, particularly since this period has also been marked by unsettled political conditions within Ghana.

It is not correct to say that "Ghana sells electricity at a loss" to the aluminum company. It is true that the contractual price of 2.625 mills is low compared with the average price to ~~the~~ other bulk customers of VRA in 1969 of 7.4 mills, but these are all more costly to supply because of their poorer load factors. Moreover, Ghana benefits from the fact that, as a result of the guaranteed payments for power from the aluminum company, the Project is a more economic source of power for other consumers than would have been possible without it. Thus, the average price paid by other bulk consumers of 7.4 mills per kWh compares with an estimated 15 mills from central thermal stations which would have been the alternative to the Project. One result is that the Electricity Corporation of Ghana is able to supply its retail customers at an average price of 28 mills per kWh, compared with over 50 mills before the Project.

The employment provided by VRA is hardly negligible, since it has an establishment of about 3,000. The smelter employs an estimated 1600.

The families who had to leave their farms to make way for the reservoir were compensated and resettled. The lake, moreover, is expected to become a valuable waterway extending some 300 miles into an area not well served by road or rail communications. Its large fishery potential is already being exploited, the 1969 catch being estimated at 50,000-70,000 tons.

GEWyatt/TERussell:gpl
IHRD

cc: Mr. Weiner
Mr. Chadenet
Central Files
Division Files

618 GH

KAISER ENGINEERS

DIVISION OF HENRY J. KAISER COMPANY

KAISER CENTER • 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

October 9, 1970

VRA/070/789

Volta River Authority
P. O. Box M 77
Accra, Ghana

Attention: Mr. E. L. Quartey, Chief Executive

Subject: Future Power Requirements of VRA
Resumes of Study Personnel
1201

Dear Sirs:

On October 2, 1970, we forwarded to you, with our VRA/070/784, the proposed Agreement between the Volta River Authority and Kaiser Engineers International, Inc. covering consulting services for the economic evaluation of alternative means to meet the Authority's future power requirements. In that letter we reiterated our earlier advice to you that Kaiser Engineers Management has transferred the responsibility for this Study from our London office, as originally proposed in February 1970, to our Oakland head office.

We have pleasure in enclosing herewith the list of the personnel which we are planning to assign to this Study, and the resumes of these personnel.

In accordance with your instruction, we are sending a duplicate of the enclosures directly to Mr. Gavin E. Wyatt, Chief, Power Division II, Public Utilities Projects Department, I.B.R.D., Washington, D.C. At your request, we are also sending to Mr. Wyatt resumes of the study team originally listed in our Proposal of February 1970. A copy of these resumes is also attached herewith.

Very truly yours,

R. A. Lowell
Project Manager

SB/RAL/mmc

Attachments

cc: Mr. Gavin E. Wyatt, I.B.R.D., Washington, D.C.

KAISER
ENGINEERS

ENGINEERING-CONSTRUCTION-CONTRACTING SINCE 1914



Record Removal Notice

File Title Volta Expansion Project / Volta Power II - Ghana - Loan 0618 - P000836 - 1969 / 1971 Administration - Volume 2		Barcode No. 1761836		
Document Date 09 October, 1970	Document Type Letter			
Correspondents / Participants From: R. A. Lowell, Project Manager, Kaiser Engineers To: E.L. Quartey, Chief Executive, Volta River Authority				
Subject / Title Future Power requirements of VRA Resumes of study personnel				
Exception(s) Personal Information				
Additional Comments		The item(s) identified above has/have been removed in accordance with The World Bank Policy on Access to Information or other disclosure policies of the World Bank Group.		
		<table border="1"><tr><td>Withdrawn by Sherrine M. Thompson</td><td>Date May 04, 2011</td></tr></table>	Withdrawn by Sherrine M. Thompson	Date May 04, 2011
Withdrawn by Sherrine M. Thompson	Date May 04, 2011			

Central Files

① Mr. Bailey
② Mr. Manning

618 GH

KAISER ENGINEERS

DIVISION OF HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

October 9, 1970

Date Rec'd. Oct 12/70
Date Ack'd. 10/14/70 Quartey
Assigned to Wyatt

Public Utilities Projects Department
International Bank for Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433

Attention: Mr. Gavin E. Wyatt
Chief, Power Division II

Subject: Volta River Authority, Ghana
Future Power Requirements

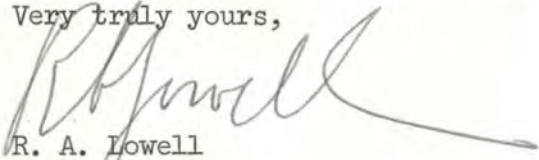
GH-0-181

Dear Sirs:

Enclosed please find a copy of our letter VRA/070/789 of October 9, 1970 to Mr. Quartey, Chief Executive of the Volta River Authority, and a copy of the attachments to this letter.

We trust that the letter is self-explanatory and that you will find that the enclosures satisfy the requirements of your letter of July 16, 1970 to Mr. Quartey.

Very truly yours,



R. A. Lowell
Project Manager

RAL/SB/mmc

Attachments

cc: Mr. E. L. Quartey, VRA (VRA/070/790)

KAISER ENGINEERS

ENGINEERING · CONSTRUCTION · CONTRACTING SINCE 1914

COMMUNICATIONS
SECTION

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COMMUNICATIONS SECTION



VOLTA RIVER AUTHORITY

6184H
Mr. Bailey
Mr. Memon

Our Ref. 231/6610
Your Ref.

Cables VOLTA, ACCRA
Phone 64941

Date Rec'd. Oct. 13/70
Date Ack'd. Nov. 25/70.
Assigned to Wyatt
P. O. BOX M77,
ACCRA, GHANA
Date 8th October, 1970

International Bank for Reconstruction
and Development,
Washington, D.C. 20433,
U.S.A.

GH-0-183

Dear Sirs,

Attention: Mr. Gavin E. Wyatt

We are writing to seek your approval to cover a loan of N¢300,000 which the Authority took from the Ghana Government in 1968 when the Authority experienced a temporary shortfall in its cash position for that year following the devaluation of the Cedi in 1967.

Our original request to the Government was for funds to be provided as an increase in the Ghana Government's equity contribution. The Government has, however, insisted that the amount provided should be considered as a short-term loan repayable within 5 years with a two-year grace period and bearing interest at 6½%.

Although we have discussed the status of these funds several times with your officials, strictly your approval is required for this transaction and we are, therefore, writing to request you to give your formal approval for the Volta River Authority to take the loan of N¢300,000 from the Ghana Government, for a term of 5 years including 2 years grace period and with interest at 6½%.

Yours sincerely,

E. L. Quartey
CHIEF EXECUTIVE

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LOUISIANA BUREAU OF INVESTIGATION



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P.O. BOX M77,
ACCRA, GHANA

Our Ref. 231/6506

Phone 64941

Date September 30, 1970

Your Ref.

ENG. 213

Mr. Gavin E. Wyatt,
Chief, Power Division II,
Public Utilities Projects Department,
International Bank for Reconstruction
and Development,
International Development Association,
1818 H. Street N.W.,
Washington D.C. 20433,
U.S.A.

Date Rec'd. Oct. 7/70
Date Ack'd. No reply req.
Delivered to Wyatt
Min

GH-0-179

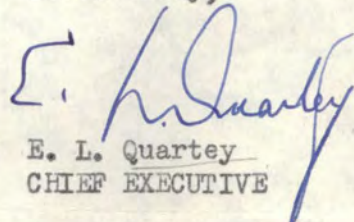
Dear Mr. Wyatt,

Re: Loan 618-GH Volta Expansion Project
Study Future Expansion

We thank you for your kind letter of September 21, 1970, clarifying the extent and depth of the proposed power study of the Nigerian facilities and installations, in the light of the general evaluation studies to be undertaken by Kaiser Engineers. Our suggestion to delete that portion of the studies was based on your earlier request for a detailed survey of the Nigerian power potential. We are glad of your clarification of the matter, and will inform Kaiser Engineers accordingly.

With kindest regards,

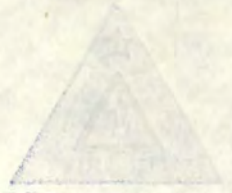
Yours truly,


E. L. Quartey
CHIEF EXECUTIVE

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SECTION
COMMUNICATIONS



WORLD BANK

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03/12/50

September 30, 1970

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Mr. Gavin S. Watt,
Chief, Power Division II,
Public Utilities Project Department,
International Bank for Reconstruction
and Development,
International Development Association,
1818 R Street, N.W.,
Washington, D.C. 20540,
U.S.A.

Dear Mr. Watt,

Re: Loan 618-81 Volta expansion project

Volta Project

We thank you for your kind letter of September 21, 1970, clarifying the extent and depth of the proposed power study of the Akosombo facilities and installations, in the light of the general evaluation studies to be undertaken by local engineers. Our suggestion to relate that portion of the studies was based on our earlier request for a detailed survey of the Akosombo power potential. We are glad of your clarification of the matter, and will inform Katsina engineers accordingly.

With kindest regards,

Yours truly,

[Signature]
E. M. L. L. L.
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COMMUNICATIONS SECTION

61864

Mr. Gavin E. Wyatt

September 25, 1970

Ali N. Memon

GHANA - Loan 618-GH
Volta River Authority (VRA)
1969 Audit

1. We have now received the audited financial statement of VRA for the year ending December 31, 1970. The operating results are substantially similar to those reported in the unaudited statements and commented upon in my memorandum of August 26, 1970.

2. VRA's auditors Messrs. Cooper Brothers & Co. in their letters to VRA's management have drawn their attention to a number of shortcomings discovered during the course of the audit. Some of the points mentioned are:

- (a) The land upon which VRA's office building is situated is vested with the Government. VRA does not even have a letter of allocation for the land.
- (b) There is no formal agreement with the Electricity Corporation of Ghana (ECG) in respect of its occupation of the office building built by VRA.
- (c) There are a number of problems relating to stock inventory - difficulty in reconciliation of final figure; need for creating a provision for obsolete and slow moving stocks; control of stock level in various stores and pilferage.
- (d) There are a number of bookkeeping procedural weaknesses - engineering section is not checking the draft or final demand notes relating to power sales; cash receipt forms are not being checked against the record of remittances received, cash book or paying in slips; weak security in cash office; payroll records not upto date; capital work in progress transfer forms not being properly checked; overhead allocation journal vouchers not dated and have insufficient narration; excessive delay in transfer of social security funds; and omission of a bank account from draft.
- (e) There is need to carry insurance to cover loss of cash and loss of stores from fire, burglary and other risks.

3. The problems relating to title to the properties mentioned in paragraphs 2 (a) and (b) are typical of the Government owned enterprises. Both the Government and the enterprise usually do not see

September 25, 1970

the need for titles, nevertheless it should not be difficult to solve these problems unless some law of the land stands in the way. I understand from the correspondence that steps are being taken to correct the problems mentioned in paragraphs 2 (c) and (d). The need for insurance mentioned in paragraph 2 (e) depends on availability of adequate insurance on reasonable cost.

4. I recommend that we should not take any action at this time other than advising VRA that we have noted the weaknesses and hope that they will be able to correct the situation. The situation should be looked into by the next supervision mission which is scheduled for January 1971.

AM
ANMemon:jmca
IBRD

cc: Messrs. Nissenbaum, Minnig & Memon
Central Files
Division Files

6186H

Your Reference: 231/5944

September 21, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M77
Accra, Ghana

Dear Mr. Quartey:

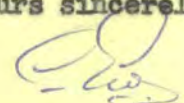
Re: Loan 618-GH Volta Expansion Project
Study Future Expansion

Thank you for your letter of September 10, 1970 with which you informed us of your views on Section A-3 of the draft contract with Kaiser Engineers International Inc.

We agree that VRA should not request Kaiser to analyze in detail the costs of each of Nigeria's existing and expandable hydro and thermal generating facilities. We also agree that any Nigerian offer for sale of power to Ghana should not be based on the cost of any particular generating facility. Nevertheless we consider it important that VRA should have the information at its disposal to enter into meaningful negotiations with Nigeria if the conclusions of Kaiser's study indicate an interconnection with Nigeria to have economic advantages. It is therefore important that the study should indicate the order of magnitude for costs of projects in the Nigerian system and also their proposed construction and commissioning sequence.

The deletion of this aspect of the study, as requested by you, would preclude the comprehensive economic comparison of the available alternatives which we would expect any utility to undertake before embarking on a program of capital development. Moreover, we would not expect the inclusion of this item to greatly influence the cost of the study.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

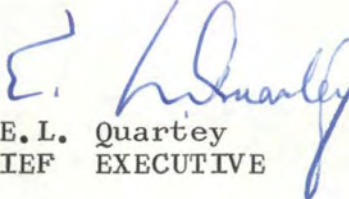
EAMinnig/GEWyatt:dd
IBRD/IDA

cc: Messrs. Nissenbaum/Ram (Area, Western Africa)
Clyde (Legal)
Wyatt
Memon
Central Files
Division Files (GH-O-168)

Min

I believe that our pressure on Kaiser to expand the scope of work without increasing the cost to VRA is hindering finalisation of the agreement; and wish, therefore, to propose that we delete this particular recommendation of yours. I would appreciate your early confirmation that we can proceed to conclude the agreement with section A-3 as originally proposed.

Yours truly,


E.L. Quartey
CHIEF EXECUTIVE



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

Phone 64941

P. O. BOX M77,
ACCRA, GHANA

Our Ref. *231/5944*

Your Ref.

Date. 10th Sept. 1970

Date Rec'd.

Date Ack'd.

Mr. Gavin E. Wyatt,
Chief, Power Division II,
Public Utilities Projects Dept.,
International Bank for Reconstruction & Development,
1818 H Street, N.W.,
Washington, D.C. 20433,
U.S.A.

Dear Mr. Wyatt,

GH 0 - 168

LOAN 618 - GH
POWER STUDY FUTURE EXPANSION
DRAFT CONTRACT KAISER ENGINEERS INTERNATIONAL, INC.

Further to my letter of August 10, 1970 conveying our observations on your letter of July 16, I wish to make some additional comments which, if accepted by you, should help speed up the execution of the agreement for Kaiser Engineers International, Inc. to go ahead with the study on the future expansion study.

In your letter of July 16, you commented on section A-3 as follows:

"We recommend the following wording of sub-paragraph (b): of existing and expandable hydro-electric and thermal generating facilities in Nigeria, including Jebba, Shirro Gorge and Benue Projects."

After further consideration of this suggestion, and judging from the delay in receiving a reply from Kaiser Engineers International Inc. on the matter, I am reinforced in my opinion that if the VRA were to purchase power from Nigeria, at any time, the Nigerian price offer to Ghana would be based on their grid cost, rather than the cost of any particular generating facility. The VRA should, therefore, not be interested in analysing costs and capacities of each of Nigeria's existing and expandable hydro and thermal generating facilities. To increase the scope of the Kaiser study in this manner will only add to the cost of the study - which will, incidentally be borne by the VRA - but will, also, delay its completion without giving the Authority much valuable information on the choice of its next source of generation or additional energy.

6186A

OFFICE MEMORANDUM

TO: Files

DATE: September 4, 1970

FROM: E. A. Minnig *Min*SUBJECT: GHANA - Loan 618-GH, Volta River Authority (VRA)
Volta Expansion Project
Loan Documents

1. This memorandum summarizes the principal covenants incorporated in the loan documents.

A. Consultants

2. The Borrower is required to have completed by December 31, 1969 a tariff review.

3. The Borrower is required to engage the services of consultants to review future expansion plans by December 31, 1971 in order to determine the most economic development of the Borrower's generating capacity after completion of the Project.

The review of future expansion plans would cover hydro and thermal developments and import of power from Nigeria. The 161 kV double circuit 180 mile long transmission line from Akosombo to Cotonou (to Dahomey) proposed for construction in 1970 and commissioning in 1972, which was financed by Canada would need to be extended by about 50 miles in order to interconnect the Ghanaian and Nigerian systems. The transmission capacity of such a line would enable at least 150 MW to be transferred between Ghana and Nigeria. The benefits to Ghana would be that with Nigeria providing standby power only, installed capacity at Akosombo (6 x 128 = 768 MW) could be fully utilized and investments in further generating facilities postponed by up to five years. It is expected that this solution will be more economic than the construction of 150 MW of new generating plant in Ghana. The consultants' review is intended to establish the merits of alternative proposals and to serve VRA as a basis for possible discussions and negotiations with Nigeria.

4. The Borrower is also required to carry out a review with the assistance of consultants if necessary:

- (i) Of the Borrower's operations, organizational structure and staffing policies by June 30, 1970; and
- (ii) of the Borrower's accounting system and practices by December 31, 1969.

VRA suffers from a shortage of qualified staff and six senior positions are vacant. At the same time overstaffing exists in some areas. The functions and objectives of the major organization units need to be (1) related to operational requirements, and (2) defined. This review will be carried out by the Manager of Ontario Hydro's Management Services Department. The Borrower's accountancy department needs to be reorganized and procedures need to be improved to eliminate weaknesses in bank

reconciliations; control of miscellaneous debit balances; control over accounts payable, accruals and stores; contract ledgers need improvement; the asset register requires up-dating; and cost allocation procedures need to be established and carried out.

B. Rate of Return Requirement

5. The loan documents (Section 5.09 of the Loan Agreement) require VRA to earn for the fiscal year ending December 31, 1974 and thereafter, an annual rate of return of not less than 8% on the Guarantor's (Government's) investment in the Borrower. This covenant is the same as for the first Volta Loan 310-GH. However, the Guarantor's investment was specified and defined as "the book value of (a) the Guarantor's capital contributions to the Borrower for the Borrower's electrical power generation and transmission facilities and operations (the same as applied under Loan 310-GH) and (new) (B) cumulative earnings generated by and retained in the Borrower's power operations, increased by amounts corresponding to appropriate revaluations of the Borrower's electric power generation and transmission facilities." The reason for the latter was to take account of the 30% devaluation of the Ghana currency in July 1967.

C. Management

6. Bank approval is required to proposed appointment to the position of Chief Executive. This covenant was taken over from the previous Agreement to Loan 310-GH.

D. Non-Power Operations

7. The most important prohibitive covenant is Section 5.15 of the Loan Agreement. This covenant requires the Borrower to finance the cost, both capital and recurrent, of the non-power operations without resort to the revenues of the Borrower from power operations. In addition the Borrower is required to ensure that the organization and the staff of the Borrower are adequate to enable the Borrower to engage in its non-power operations without detriment to the efficient conduct of its power operations; and that accounts for each of its non-power operations are maintained separately from those for its power operations. The reason for this covenant was:

Ghana's need to borrow most of the foreign exchange requirements results in VRA having a substantial surplus of local currency funds not required for power expansion. Direct investment of these in VRA's non-power activities, although provided for in the 1961 Volta Development Act, might not be the best use for them from a general economic point of view. It was therefore agreed that such surplus funds not required for power operations could be returned to the Government's development budget in the form of a dividend on the assumption that their allocation would be made on the basis of overall national priorities. The advantages of this are that:

- (i) Funds would be allocated on the basis of nationally-assigned priorities, rather than the narrower criteria -- at least geographically -- of the 1961 Volta Development Act;
- (ii) an effective separation of accounts for VRA's various activities could be brought about; and
- (iii) this would provide a ready measure of the relative efficiency of investments in VRA's different operational sectors such as power, agriculture, and transportation.

E. Conditions Relating to Effective Date of Loan

8. The following three conditions were made:

- (i) The Borrower was required to engage engineering consultants for the Project. Consultancy services are financed by USAID out of the undisbursed portion of AID's original Volta Loan. VRA has engaged Kaiser Engineers International Inc. and USAID has agreed to finance the foreign exchange cost element of these services;
- (ii) the Canadian Loan Arrangement was required to have been entered into in form and substance satisfactory to the Bank. Canada agreed to finance generators, auxiliary electrical equipment, transformers and substation equipment connected with the Volta Expansion Project; and
- (iii) the Volta Aluminum Company (VALCO) was required to make arrangements satisfactory to the Bank for (1) the financing of the smelter expansion and (2) the operation of the expanded smelter so as to enable VALCO to meet its obligations under the Power Contract. VALCO is VRA's principal consumer, and the expansion of generating facilities is needed to enable VRA to meet its commitments under the Power Contract.

F. Processing Delays

9. Processing of the loan was delayed because of several factors. They are:

- (i) Canadian Loan Arrangements. Canada imposed three conditions which were slow in being met;
 - (a) Agreement between Ghana, Togo and Dahomey on the export of power to Togo and Dahomey (July 1969);
 - (b) formation of a joint Togo and Dahomey Power Authority (July 1968); and
 - (c) agreement between Ghana, Togo and Dahomey of the transmission line route connecting Akosombo with Lome (Togo) and Cotonou (Dahomey) (July 1968);

- (ii) VALCO. The terms of the power contract between VALCO and VRA gave VALCO an option to increase demand with one year's notice. VRA, however, requires at least 30 months to provide additional power because of the need to expand generating facilities to meet such an increase. VALCO was not willing to give, at an early date, adequate assurance whether the option would be exercised and as a consequence VRA was reluctant to proceed with the expansion, and the Bank with the processing of the loan, since the increased smelter demand was the main justification for the expansion; and
- (iii) Consultants. The original terms and conditions of the contract between VRA and their consultant were not acceptable to USAID. To meet USAID requirements, negotiations proved difficult and time consuming.

10. Once assurances were obtained that the above conditions and arrangements were underway and would be met, processing of the loan was possible and the finalized arrangements, to be satisfactory to the Bank, made a condition of effectiveness.

EAMirmig/GEWyatt:dd
IBRD/IDA

cc: Mr. Chadenet
Departmental Black Book
Divisional Black Book
Data Bank Files
Messrs. Reitter
Nissenbaum/Ram (Area, W. Africa)
Bennett (Controller's)
Clyde (Legal)
Mirmig
Memon

618 GA

61864

September 3, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M77
Accra, Ghana

Dear Mr. Quartey:

Re: Loan 618-GH
Volta Expansion Project
Reporting Requirements

With reference to Section 5.02 of the Loan Agreement, I am enclosing a memorandum pertaining to the Progress Report and other reports the Bank would like to receive. These requirements differ from those requested under Loan 310-GH and utilized to date for Loan 618-GH. We hope, however, that VRA will not find these burdensome but useful also for its own requirements. The subjects to be included in these reports are outlined, but you are free to rearrange or add to the headings as long as the reports cover fully the points outlined in the attached memorandum and indicate the progress of the project and operation of the Authority.

In addition to the periodic reports we would like to be informed promptly about any important changes which are planned or events which have occurred.

Please submit two copies of each report and address them to the undersigned.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Enclosure

mi EAMinnig/GEWyatt:dd
IBRD/IDA

cc: Messrs. Ram
Saeed/Ducker
Wyatt
Memon
Central Files
Division Files

61864

Files



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA
Phone 64941

P. O. BOX M77,
ACCRA, GHANA

Our Ref. 231/5804

Your Ref.

Date 1st September, 1970.

International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington D.C. 20433,
U. S. A.

Attention: Mr. Gavin E. Wyatt.

Dear Sir,

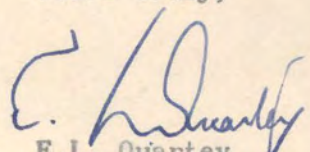
We have ~~already~~ ^{today} sent you a cyclostyled version of the Authority's Annual Report for 1969 containing the Auditors Statement of Account for the year.

We now forward copies of the following reports prepared by the Auditors:

- (a) Report dated 9th June 1970 on internal control.
- (b) Report dated 22nd July 1970 on the accounts.
- (c) Report dated 22nd July 1970, to the Controller, A.I.D. Mission to Ghana.

We will forward copies of the printed version of the Annual Report and Accounts as soon as these are ready.

Yours truly,


E.L. Quartey
CHIEF EXECUTIVE

Encls:

COOPER BROTHERS & CO.

LAGOS ACCRA MONROVIA
LONDON ABACUS HOUSE, GUTTER LANE, CHEAPSIDE
EC 2

CHARTERED ACCOUNTANTS

TELEPHONE ACCRA 23681
TELEGRAMS COOPERS, ACCRA

UNITED KINGDOM UNITED STATES OF AMERICA
CANADA MEXICO BERMUDA BAHAMAS JAMAICA
PUERTO RICO VENEZUELA AUSTRALIA NEW GUINEA
NEW ZEALAND MALAYSIA SINGAPORE HONG KONG
IRAN, BELGIUM, DENMARK, FRANCE, GERMANY THE
NETHERLANDS, ITALY, NORWAY, SPAIN, SWEDEN
SWITZERLAND SOUTH AFRICA, RHODESIA, ZAMBIA
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S JOHN PEARS DAVID C HOBSON
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BRIAN A MAYNARD C OYENIYI O OYEDIRAN

P. O. BOX 2533,
COCOA HOUSE,
LIBERTY AVENUE,
ACCRA,
GHANA.

E.L. Quartey, Esq.,
Chief Executive,
Volta River Authority,
P.O. Box M77,
Accra.

9th June, 1970.

Dear Sir,

Interim Audit Report for the year ended
31st December 1969

In the course of our audit for the year ended 31st December, 1969, we examined the principal internal controls which your Authority has established to enable it to ensure, as far as possible, the accuracy and reliability of the Authority's records and to safeguard its assets. We are writing to you in order to draw your attention to the weaknesses in control which came to our notice during this examination and to suggest ways in which this system could be improved.

2. As we explained in our interview the examination of a system which we carry out for the purposes of our audit does not necessarily disclose every weakness, and for this reason, the matters dealt with in this letter may not be the only shortcomings which exist in the system. The weaknesses revealed by our audit were not major and in most cases were the result of lapses in carrying out the existing procedures.

3. Apparent weaknesses have been reviewed under the following headings:-

	<u>Paragraph</u>
Power sales	4 - 5
Sundry debit notes	6
Cash receipts	7 - 9
Payroll	10 - 12
Stocks	13 - 14
Job ledgers - Accra	15 - 16
Interim accounts	17
Internal audit	18
Insurances	19 - 20

Power sales

4. We noted that a detailed internal audit report had been prepared in connection with power sales listing several internal control weaknesses. From discussions with the Chief Internal Auditor and Management, we are satisfied that the significant recommendations have or will be implemented.

5. In addition to the above mentioned weaknesses, we noted that there is no written evidence that the engineering section is checking the draft or final demand notes. We recommend that the file copies of draft and final demand notes is signed by a responsible official in the engineering section, as evidence of this review and approval.

Sundry debit notes

6. We noted that the Chief Internal Auditor had prepared and discussed with you and the Chief Accountant a memorandum covering the weaknesses disclosed in the course of their audit. Our limited tests disclosed no further weaknesses and from discussions with the Chief Internal Auditor and clerks concerned, we are satisfied that steps are being taken to implement their recommendations, especially with respect to the collection of old outstanding debtors' balances.

Cash Receipts

7. We noted that cancelled and altered receipt forms are retained in the book but are not being properly authorised. We recommend that they are authorised in writing by a responsible official independent of cash receipt functions.

8. We noted that copies of receipt forms are not being checked against the record of remittances received, the cash book or paying in slips. We recommend that this is done on a test basis, by a person independent of cash receipt functions and that the relevant documents are initialled as evidence of this comparison. We understand that paying in slips are compared to the cash book as part of the monthly check of bank reconciliations and that this is evidenced by the signing of the bank reconciliation.

9. Security in the cash office appears to be weak in that access is available to persons other than cash office staff. We recommend that a cage or similar structure is constructed, to avoid the possibility of the misappropriation of funds.

Payroll

10. We noted that salary increments granted in December 1969 still had not been reflected on staff history cards by April 1970. In addition, the history records did not record a specimen signature of the employee nor were they countersigned by a responsible official of the personnel department. We recommend that history record are kept up to date at all times.

11. We noted that for daily rated workers there were no individual personnel files but instead a general file containing all of their employment advice slips. Considerable difficulty was encountered in obtaining specific information from this file and in the interest of clarity, we recommend that individual files are set up for each employee.

12. The control over unclaimed wages appears to be weak in that the wage packets and unclaimed wages book are under the control of the payroll department personnel. To strengthen the control over unclaimed wages, we recommend that after a payout, a responsible official independent of the payroll department record all names from the payroll sheets which have no signature or thumbprint beside them, into an unclaimed wages register. We understand that the unclaimed wages procedures have been revised from 1st January 1970.

Stocks

13. As you are aware, there was considerable delay in obtaining store I.B.M. tabulations. This meant that stores ledger balances had not been reconciled with control accounts for the last six months of 1969. We understand that in future any systems which are to be computerised will be run in parallel with the old system until the new system is completely operational.

14. At the time of our audit there was no evidence that stores issue vouchers or waybills were being batched and totalled prior to submission to I.B.M. for tabulation. We understand that all vouchers are now batched and totalled prior to key punching and processing by I.B.M. and that these batch totals are compared to tabulation totals, to ensure that all documents are processed.

Job ledger - Accra

15. There was no evidence to suggest that capital work in progress transfer forms were being checked by a responsible official. We recommend that all such forms are reviewed by a responsible official and signed as evidence of this review and approval.

16. We noted that some overhead allocation journal vouchers were not dated and had insufficient narration. In addition, there was no evidence to suggest they had been checked. We recommend that all such journal vouchers are completed properly and signed by a responsible official as evidence of his review and approval.

Interim accounts

17. We noted that quarterly reports were being produced three or four months after the quarter. This means of course that any weaknesses or deviations reflected in the accounts cannot be acted upon until another quarter or more has passed. We recommend that the stipulated procedures are implemented to expedite production of these accounts. We also suggest that the interim accounts would be more informative if provision was made for a comparison of actual with budget.

Internal audit

18. We were pleased to note that during 1969, this department had been organised into an effective unit. Audit programmes were being followed, written reports prepared and recommendations implemented. It is hoped that with a new Chief Internal Auditor being appointed from within the Authority in the near future, the department will continue to be run with the same independent and authoritative attitude.

Insurances

19. We noted there is no fidelity insurance to cover loss of cash. We recommend that consideration is given to this type of insurance as an additional safeguard against the loss or misappropriation of funds.

20. We noted that stocks were not covered by insurance against loss from fire, burglary and other risks. We recommend that consideration is given to this type of insurance.

21. We have included a number of minor points as an appendix to this letter.

22. We should be glad if you would inform us in due course what steps you decide to take in connection with the above matters. Please also inform us from time to time when any changes are made in the existing system of internal control.

We would like to take this opportunity to thank you and your staff for your co-operation during the course of our audit.

Yours truly,

COOPER BROTHERS & CO.

VOLTA RIVER AUTHORITY
31ST DECEMBER, 1969

Purchases

1. Although waybills are prepared for all goods returned to suppliers, the system appears to be weak in that there is no proper control over goods returned records. We understand that returns are rare but recommend that a proper system is implemented to ensure that credit notes are obtained for all returns.

Payroll

2. We noted an instance where an employee's name appeared in the unclaimed wages book for three consecutive months. This man had apparently left but the payroll department was not advised of this for three months. We recommend that the payroll department is advised immediately of any terminations.

Debit notes - Akosombo

3. We noted instances where tenancy agreements were not filed and one instance where there was not a tenancy agreement nor was the property on the rent roll. We recommend that tenancy agreements are completed for every housing rental.

4. In a comparatively small sample, two calculation errors were detected. We recommend that calculations and additions on all debit notes are independently checked by a responsible official and that they are signed as evidence of this check and approval.

5. To expedite any follow up action required, we recommend that journal voucher folios are cross referenced to the debit note register.

Vehicle workshop - Akosombo

6. Written defect reports were not being prepared for every job. We recommend that the practice of giving verbal authorisation is discontinued and that written defect reports be prepared for each job. These should be approved in writing by the workshop supervisor, prior to commencement of the work.

7. We noted instances where hours worked per time sheets were incorrectly posted to job cards, either as wrong totals, or complete omissions. We suggest that the labour allocation to job cards are independently checked.

COOPER BROTHERS & CO.

LAGOS, ACCRA, MONROVIA
LONDON ABACUS HOUSE, GUTTER LANE, CHEAPSIDE,
EC. 2

CHARTERED ACCOUNTANTS

TELEPHONE ACCRA 23581
TELEGRAMS: COOPERS, ACCRA

UNITED KINGDOM, UNITED STATES OF AMERICA,
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P. O. BOX 2533,
COCOA HOUSE,
LIBERTY AVENUE,
ACCRA,
GHANA.

E.L. Quartey, Esq.,
Chief Executive,
Volta River Authority,
Accra.

22nd July, 1970.

Dear Sir,

Accounts Year Ended 31st December, 1969

We have pleasure in enclosing the original of the accounts of the Volta River Authority for the year ended 31st December, 1969 which we have signed as auditors under the date 17th July 1970.

2. During the course of our audit of the final accounts we noted a number of matters to which we wish to draw your attention. We have discussed all these points with the Authority's senior accounting staff and we understand that, where appropriate, the necessary action is being taken to clear them.

General

3. The main problem encountered during this year's audit was the difficulty in obtaining satisfactory reconciliations of the final stock figures. This appeared to be due to the initial difficulties in transferring the detailed stock records to the Authority's computer during the year. We comment in paragraphs 6 to 11 below on the principal shortcomings in the accounting control over stocks during the year. We appreciate that the Authority's senior accounting staff are aware of these shortcomings and now that the initial setting up problems are over it should be possible to strengthen controls.

Title to Properties

4. The land upon which the Authority's office building is situated is vested with the Government. It also appears uncertain whether the Authority has title to all the land on which its other buildings are situated. We recommend that the legal department obtain letters of allocation for the land upon which the offices are situated and for other properties of the Authority.

5. There is no formal agreement with the Electricity Corporation of Ghana in respect of its occupation of the office block built by the Authority. We recommend that such a formal agreement be obtained as soon as possible.

Stocks

6. The stock figure in the accounts is based on the result of the physical count carried out at the year end. We have discussed the results of the observations of the stock taking by the internal audit department, with the chief internal auditor, and are of the opinion that the stocktaking was properly conducted and that the results can be relied upon. However the evaluation of the figures counted did not appear to be completely satisfactory. Our audit tests revealed instances where stocks counted and shown on the rough stock sheets were omitted from the computer tabulations. Our tests also revealed one material pricing error of N\$76,540. These instances were brought to the notice of the staff concerned and the necessary adjustments were satisfactorily made.

7. We noted that monthly reconciliations of the detailed stock records with the nominal ledger control account balances had not been made during the second half of 1969. An attempt was made to carry out such reconciliations at the year end but our audit tests revealed that these reconciliations (particularly the reconciliation for store 823) were not reliable. In view of the unsatisfactory stock reconciliations it was agreed with the Chief Accountant, that the excess of the evaluated physical stock count over the nominal ledger control account figures should be carried forward pending a detailed investigation during the current year of the various stock reconciliations and discrepancies. The amount of the excess was N\$112,120.

8. The advisability of creating a provision in the accounts for obsolete and slow moving stocks was discussed with the Chief Accountant. We understand that the first monthly meeting of the material usage committee was held in July 1970, one of the terms of reference of which is to review the items in the unmoved stores ledgers for possible obsolete stocks. We are of the opinion that through the regular meetings of the material usage committee, this aspect of the Authority's activities will be properly controlled in the future.

9. The chief accountant agreed that a provision for slow moving stocks was probably required in the 1969 accounts, but he stressed the difficulty of determining the basis for such a provision. At our request the chief accountant obtained an opinion from the supervising mechanical engineer on certain stock items totalling N\$108,000 which have shown no movement since July 1968. We understand that in the engineer's opinion the stocks referred to will eventually be used. On this basis we have agreed that the provision for obsolete stock required in the 1969 accounts would not be material and that as a result of the findings of the material usage committee the matter should be clarified in time for the 1970 accounts.

10. Akosombo Operation store, Number 823, shows an increase of approximately 100% compared with 1968. We were informed that the reason for this increase is attributed to a) increased purchases in the year, b) to price adjustments, and c) to possible errors in the 1968 stock figures. We feel that large increases in stock control account totals should in future be the subject of full investigation.

11. The stationery stores and the Accra property stores revealed a shortage in total of N\$97,185 when the stores physically counted were compared with the nominal ledger control accounts. These shortages, which we were informed were largely the result of pilferage, are currently being investigated by the internal audit department. The defalcations reflect a weakness in the control procedures operated for these stores in 1969. We have discussed the shortages with the chief accountant who is confident that in future the control over the stationery stores and Accra property stores will be effective, as continuous records relating back to March 1970 are to be prepared within the next few weeks, and maintained on the computer, for these stores.

Interest Account - Long Term Loans

12. The amount of the interest accrued to 31st December 1969 on all of the long term loans was mis-calculated, resulting in a net over-accrual of N\$67,716. The commitment charge accrued to 31st December 1969 of N\$14,410 on the New IBRD loan was not brought into the accounts. These matters were drawn to the attention of the chief accountant and the accounts amended. We recommend that in future these calculations should be checked by a senior official of the treasury department.

Foreign Exchange Loss

13. As a result of the revaluation of the German mark, the Authority suffered a foreign exchange loss of N\$351,567. The loss has been debited to the existing capital reserve.

Volta River Authority Offices

14. Capital contributions so far received from the Electricity Corporation of Ghana towards the cost of the offices at Volta House total N\$4,52,884. In addition a debtor of N\$230,000 has been brought into the accounts to bring the Electricity Corporation of Ghana's contribution to approximately 50% of the total cost of the offices. The total contribution by Electricity Corporation of Ghana has been deducted from land and buildings in the balance sheet.

Current Accounts.

15. There are unexplained differences on current accounts as follows :-

- (i) Agency Services N\$7,482
- (ii) Trading Units N\$24,909

These accounts were not reconciled regularly during the year. We have discussed the differences with the senior staff concerned, and we understand that investigations will be conducted to identify the differences and action taken accordingly. We recommend that such reconciliations be carried out monthly in future. The differences on the current accounts have been included in sundry debit balances pending investigation.

Ghana Government Agency Services

16. During our audit of the Ghana Government Agency Services accounts we noted that :-

- (a) Social security deductions from July 1969 had still not been paid over by the year end, and
- (b) A bank account of N\$5,781.61 was omitted from the draft accounts. We were informed that this was due to a failure to notify the Financial Accountant of the opening of the account. The draft accounts were amended for this item. A small balance of N\$29.74 on the Akosombo remittance account has been ignored in the accounts.

17. We noted that at present only one cash book is maintained for all Agency projects. We suggest that separate cash books should be obtained for each project.

18. Physical stocks are N\$61,163 in excess of the nominal ledger control figures. This amount is carried forward pending investigation in the current year.

Should there be any further information that you require in connection with this report please do not hesitate to let us know.

Yours truly,

COOPER BROTHERS & CO.

COOPER BROTHERS & CO.

LAGOS, ACCRA, MONROVIA,
LONDON ABACUS HOUSE, GUTTER LANE, CHEAPSIDE,
EC 2.

CHARTERED ACCOUNTANTS

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P.O. BOX 2533,
COCOA HOUSE,
LIBERTY AVENUE,
ACCRA,
GHANA.

The Controller,
A.I.D. Mission to Ghana,
Ghana Commercial Bank Building,
High Street,
Accra.

22nd July, 1970.

Dear Sir,

Volta River Authority Accounts as at December 31, 1969

In accordance with the standing instructions of the Chief Executive of the Volta River Authority we are writing to you in connection with our audit of the accounts of the Authority for the year ended December 31st 1969. We enclose four copies of the accounts and of our report as statutory auditors.

2. In the following paragraphs we report on the further information referred to in your memorandum of May 25th, 1962 entitled "A.I.D. Audit Requirements - Audits Performed by Independent Public Accountants".

Scope of Audit

3. Our examination of the accounts was made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Results of Certain Specified Audit Procedures

4. We comment below on the audit procedures specified in your memorandum of May 25th 1962.

Minutes of Meetings

5. We examined the Minutes of the Authority's Board. The following significant points were noted.

- (a) An agreement was signed between Kaiser Engineers and Volta River Authority whereby Kaiser is to provide engineering services for the extension of the Authority's power generating facilities and for the erection of the Volta sub-station and a transmission line between the latter and the Valco smelter sub-station, for a fee of US \$650,000.
- (b) State Hotels agreed to hand over the Volta Hotel to the Authority at no cost.
- (c) A loan agreement between the International Bank for Reconstruction and Development and the Authority was signed 23rd June for US \$6 million (the equivalent of which is available in various currencies). The agreement provides for a commitment charge of $\frac{1}{2}\%$ on the principal amount not drawn and interest at $6\frac{1}{2}\%$ per annum on the principal of the loan drawn.

- (d) Two loan agreements between the Ghana Government and the Authority were signed in July 1969 whereby the Ghana Government would relend to the Authority amounts made available by the Canadian Government for Canadian \$7,580,000. Interest is charged on the loan at the rate of 2½% per annum. The loans are towards the cost of installation of two generators at Akosombo, and erection of the transmission lines to Togo and Dahomey.
- (e) An agreement was signed between Volta River Authority; the Government of Ghana; the Government of the Republic of Togo; and the Government of the Republic of Dahomey whereby Volta River Authority is to sell electric power to Togo and Dahomey.
- (f) An agreement was signed between the Authority, Elder Dempster Lines Limited and Seanalake of Geneva whereby an independent joint company is to be formed :-
- The Volta Lake Transport Company Limited. Volta River Authority is to have 51% of the share capital, the initial share capital is to be N\$390,000.
- (g) An agreement was signed between the Authority and a firm of Danish Consultants who are to survey the Lake with a view to establishing ports and shore facilities.
- (h) The board approved an agreement concerning the expansion of the aluminium smelter operated by VALCO.

Major Development Contracts.

6. We examined the expenditure on the major development contracts and satisfied ourselves that these were properly reflected in the accounts.
7. We have reviewed the operation of the loan agreements, brief details of which are shown in Statement C of the accounts. We have verified loan withdrawals, repayments and interest accruals and have obtained confirmation from lenders of the balance of principal outstanding at December 31st 1969.

Ghana Government Agency Services

8. In accordance with our recommendations, separate accounts have been prepared for the Ghana Government Agency Services for 1969; formerly these were consolidated with the Authority's accounts.

Cash and Bank Balances

9. These comprise :-

	N\$
Local Bank Balances	1,729,301
Foreign Bank Balances	959,634
Cash in hand	9,066
	<hr/>
	N\$2,698,001
	<hr/>

We have obtained direct confirmation of balances from the banks concerned and have checked the reconciliations with the Authority's records.

Receivables

10. These comprise :-

	N¢
Power Sales	1,181,489
Sundry Debtors and Debit Balances	417,493
Staff Advances	148,264
Ghana Government Agency Account	183,646
Prepayments	199,727
	N¢2,130,619

11. We circularised 6 power sales debtors as at December 31st 1969 by means of positive confirmation requests. We have received replies from 3 debtors confirming a total of N¢474,960. We have carried out alternative audit tests to satisfy ourselves of the 3 remaining debtors.

Inventories

12. We were represented at the year end inventory taking by a senior member of our staff who at that time was temporarily seconded to the Authority as Chief Internal Auditor. We are of the opinion that the stocktaking was properly conducted.

13. During the year the detailed stock records were transferred to the Authority's Computer. Some difficulty was encountered in reconciling stock control accounts at the year end. The total difference of N¢112,120 between the physical count and the control accounts in the ledger is carried forward pending investigation during the current year. The introduction of stores accounting on the Computer, should lead to a strengthening of controls in the future.

Transactions after December 31st 1968

14. We have reviewed the records after December 31st 1968 without noting any transactions which significantly affect the accuracy of the accounts as at that date.

Compliance with Loan Agreement

15. We have not observed any instances of failure to comply with the covenants or warranties contained in the loan agreements.

Management and Internal Control

16. We include copies of our letter dated June 18th 1969 addressed to the Chief Executive on internal control matters arising from our interim audit.

17. We shall be glad to provide any further information you may require in connection with our audit.

Yours truly,

COOPER BROTHERS & CO.

GH-12618
AUG. 31, 1970

BASIC DATA

GHANA

LOAN 618-GH

VOLTA EXPANSION PROJECT

1. Borrower: Volta River Authority (VRA)
2. Loan Amount: US\$6.0 million equivalent
3. Date Loan Signed: June 23, 1969
4. Effective Date: October 1, 1969
5. Closing Date: December 31, 1973
6. Period of Grace: 10 years (first payment June 15, 1979).
(Grace period extended because of Ghana's difficult foreign exchange position).
7. Terms of Loan: 25 years (final payment June 15, 1994)
8. Interest Rate: 6 $\frac{1}{2}$ %
Commitment charge 3/4%
9. Amortization: Increasing from US\$115000 to US\$290000
10. Exchange Rate: 1NG = 0.98 US\$
1US\$ = 1.02 NG
11. Appraisal Report: PU-8a: May 8, 1969
12. Fiscal Year: Calendar year
13. Project Description

Installation at Akosombo of final two 128/147 MW hydro generating units. Expansion of 165 kV substations. Acquisition of service vehicles for transmission line maintenance services. Miscellaneous works. Consulting services to improve operations and management, and for study to determine VRA's future expansion program.

14. Justification

- (i) VRA's contractual obligations to VALCO who will install a fourth 70 MW potline;
- (ii) increased power demand of other consumers; and
- (iii) internal financial rate of return of 26%.

15. Construction Schedule

Unit No. 5 commissioned March 1972;
Unit No. 6 commissioned July 1972; and
Substation expansion completed end 1972.

16. Project Cost Estimate (1969-1972) Program

	In thousands of US\$		
	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
Fifth and Sixth Units <u>1/</u>	7,960	1,270	9,230
Substation Expansion <u>2/</u>	3,450	300	3,750
Transmission Line Togo and Dahomey <u>3/</u>	1,860	620	2,480
Third double circuit Transmission Line Akosombo-Tema <u>4/</u>	1,030	440	1,470
Service Vehicles	150	-	150
Consulting Services Akosombo and Substations <u>5/</u>	650	130	780
VRA overheads	-	320	320
Miscellaneous Works	300	2,940	3,240
Consulting Services	<u>360</u>	<u>140</u>	<u>500</u>
Total Program <u>6/</u>	<u>15,760</u>	<u>6,160</u>	<u>21,920</u>

-
- 1/ Canadian financing for generators and auxiliary electrical equipment main transformers.
2/ Canadian financing of Akosombo Substation.
3/ Canadian financing.
4/ Italian financing.
5/ Financed by USAID out of undisbursed portion of original Volta Loan.
6/ Includes a contingency allowance of 10%.

17. Cost Estimate of Portion of 1969-1972 Program Financed by Bank

	In thousands of US\$		
	<u>Foreign</u>	<u>Local</u>	<u>Total</u>
Turbines and Governors Installation of	1,980	-	1,980
Turbines and Governors and Civil Works	1,460	540	2,000
Substation Expansion	1,760	160	1,920
Service Vehicles	150	-	150
Consulting Services for review future expansion and accountancy reorganization	350	150	500
Minor Works	<u>300</u>	<u>100</u>	<u>400</u>
Total <u>1/</u>	<u>6,000</u>	<u>950</u>	<u>6,950</u>

1/ Includes a contingency allowance of 10%.

18. Financing Plan

The following is a summary of the requirements and sources for the period 1969-1972 during which the project will be carried out.

	<u>In millions of N\$</u>	<u>%</u>
<u>Construction Expenditures</u>		
Foreign Exchange		
Program 1969-1972	16.1	61
Future Expansion	<u>3.0</u>	<u>11</u>
Sub-total	19.1	72
Local Currency		
Program 1969-1972	6.3	24
Future Expansion	<u>1.0</u>	<u>4</u>
Sub-total	<u>7.3</u>	<u>28</u>
TOTAL	<u>26.4</u>	<u>100</u>
<u>Sources of Financing</u>		
Internal Cash Generation	37.8	
Debt Service	(29.5)	
Net Internal Cash Generation	8.3	32
Dividends	(1.0)	(4)
Net increase in Working Capital	<u>(.6)</u>	<u>(2)</u>
Cash Generation applied to Construction	6.7	26
Canadian Grant	.3	1
Foreign Exchange Borrowings		
IBRD Loan	6.1	23
Other	10.3	39
Future	<u>3.0</u>	<u>11</u>
Borrowings	<u>19.4</u>	<u>73</u>
TOTAL SOURCES	<u>26.4</u>	<u>100</u>

19. Allocation of Proceeds

Maximum Amount to be
used in each Category
(expressed in US\$ equivalent)

A. Turbines, governors, auxiliary equipment and civil works connected with the power plant expansion	3,100,000
B. Substation equipment including switchgear, transformers, auxiliary equipment, a transmission line connecting the Volta and Smelter Substations, and related civil works	1,550,000
C. Construction and Service Vehicles	150,000
D. Consulting & Training Services	350,000
E. Miscellaneous Works	300,000
F. Unallocated	<u>550,000</u>
TOTAL	<u>6,000,000</u>

20. Borrower's Organization

VRA was established by the Volta River Development Act of 1961. Under the Act VRA is empowered to go well beyond the boundaries of the power sector, making it an integrated regional development agency. The seven-man Board is appointed for terms of three years by the President of the Republic. The members include: Chief Executive of VRA, the Managing Directors of ECG and VALCO, and four members represent the general public. Senior staff vacancies exist especially in the Accounts Department. The Accounts Department needs to be reorganized, unqualified staff reduced, and a better qualified middle echelon secured.

Power facilities are operated satisfactorily. While sufficient qualified personnel is lacking as of June 1968 staff totalled 2,969 of which 830 in power and 2,139 in non-power activities. There is a danger that VRA's upper management may be overextending itself, while at the same time overstaffing exists.

21. Summary Financial Data 1/

Attached are the following annexes summarizing the present financial position and the financial forecasts of VRA:

- Annex 1: Actual and Forecast Income Statements 1965-1977
- Annex 2: Forecast Sources and Applications of Funds 1969-1977
- Annex 3: Actual and Forecast Balance Sheets 1965-1977

1/ Power operations only.

VRA is required to earn an 8% return on the power operation's equity by 1974. It is forecast that this target will be achieved.

22. Auditors

Cooper Brothers & Co., Accra.

23. Consultants

Management: Ontario Hydro, Canada

Volta Expansion: Kaiser Engineers & Constructors, Inc. (USA)

Future Expansion: Kaiser Engineers & Constructors, Inc. (USA).

24. Principal Points of Loan and Guarantee Agreement

- (i) VRA will take adequate steps to ensure that qualified personnel are recruited to fill existing vacancies;
- (ii) VRA will retain, if necessary, appropriate management and accountancy consultants to review -
 - (a) accounting system and practices;
 - (b) organization structure; and
 - (c) cost allocation and appropriate depreciation rates;
- (iii) VRA will retain engineering consultants for the project and for a study of future expansion plans;
- (iv) VRA will not, and the Government will not require it to, expand non-power activities beyond their present scope unless proper measures are taken to insure efficient operations;
- (v) VRA shall not apply any net earnings from power operations to the expansion of non-power activities;
- (vi) Rate of Return. For the fiscal year ending December 31, 1974 and thereafter, an annual rate of return of not less than 8% on the Guarantor's investment in VRA.

Net income is defined as -

the difference between gross operating revenue from power operations and operating and administration expenses related to such revenues, including taxes (if any), adequate maintenance, straight line depreciation and interest and other charges on debt; and

The Guarantor's investment is defined as -

the Guarantor's capital contributions for power facilities and cumulative earnings generated by and retained in VRA's power operations; and

- (vii) VRA is required to obtain the approval of the Bank to any proposed appointment to the position of Chief Executive of VRA prior to making of such appointment. (This was a condition of Loan 310-GH and was retained in the current Loan).

25. Taxation

VRA is exempt from income tax and from customs duties and sales tax on all imported equipment.

26. Procurement

For items financed by the Bank procurement would be on the basis of international competitive bidding.

27. Reporting Requirements

1. Progress Reports: Quarterly, with 30 days after the end of each quarter.
2. Financial Reports: Audited financial statements within six months after the end of each year.

Prepared by: E. A. Minnig
Date of Preparation: August 31, 1970

Members of Working Party:
Engineer: E. A. Minnig
Financial Analysts: G. Vacchelli
(Appraisal)
A. Memon
(Supervision)
Area: R. A. Hornstein
M. S. Ram
Legal: T. M. Clyde
Controller's: N. J. Bennett

Distribution: Messrs. Minnig, Memon
Division Black Book
Department Black Book

REPUBLIC OF GHANA

VOLTA RIVER AUTHORITY (VRA)

Actual and Forecast Income Statements, 1/ 1965-1977
(in thousands of ₵, unless otherwise indicated)

Fiscal Year ending December 31,	ACTUAL				FORECAST								
	1965	1966	1967	1968 ^{2/}	1969	1970	1971	1972	1973	1974	1975	1976	1977
Energy sold, in GWh	98.2	449.7	1,453.9	2,428.1	2,497.0	2,596.2	2,738.3	3,079.0	3,569.4	3,850.4	3,959.0	4,070.4	4,653.4
Average revenue per kwh, in NP	.73	.69	.42	.39	.40	.41	.43	.42	.42	.42	.43	.44	.43
<u>Operating Revenues</u>													
Sales of Energy	713	3,085	6,075	9,482	9,955	10,746	11,804	13,216	14,961	16,128	16,921	17,734	19,893
Other	-	155	153	227	150	150	150	150	150	150	150	150	150
Total	713	3,240	6,228	9,709	10,105	10,896	11,954	13,366	15,111	16,278	17,071	17,884	20,043
<u>Operating Expenses</u>													
Salaries and wages	143	714	833	853	895	940	990	1,085	1,140	1,200	1,260	1,320	1,740
Materials	-	-	185	135	140	150	160	200	200	200	200	200	350
Transportation	34	357	241	266	280	290	300	320	330	340	350	360	400
General charges	108	715	253	305	320	336	353	371	390	410	430	450	475
Akosombo Administration (net)	-	-	311	200	200	200	200	220	230	230	240	250	250
Hospital & Health Administration (net)	-	-	29	126	130	130	140	140	150	150	150	150	175
Depreciation	8	128	3,455	3,542	3,693	3,713	3,811	4,249	4,270	4,292	4,314	4,334	5,658
Total	293	1,914	5,307	5,427	5,658	5,759	5,954	6,585	6,700	6,822	6,944	7,064	9,048
<u>Operating Income</u>	420	1,326	921	4,282	4,447	5,137	6,000	6,781	8,411	9,456	10,127	10,820	10,995
Interest	1,848	3,312	4,003	4,049	3,900	3,843	3,915	4,063	4,302	4,774	5,132	5,214	5,254
Less: Interest charged to plant	(1,848)	(3,312)	-	-	(6)	(164)	(429)	(748)	(475)	(1,124)	(1,674)	(1,962)	-
Total	-	-	4,003	4,049	3,894	3,679	3,486	3,315	3,827	3,650	3,458	3,252	5,254
<u>Net Income (Loss)</u>	420	1,326	(3,082)	233	553	1,458	2,514	3,466	4,584	5,806	6,669	7,568	5,741
Return on Equity, %		2.2	-	.4	.9	2.3	3.9	5.1	6.5	8.0	8.6	9.0	6.5
Return on Average Net Fixed Assets in Operation plus Working Capital Allowance, %		1.2	.7	3.1	3.2	3.8	4.5	4.8	5.8	6.7	7.3	8.0	7.0

1/ Power operations only.

2/ Preliminary figures, subject to audit.

April 24, 1969

ANNEX I

REPUBLIC OF GHANA

VOLTA RIVER AUTHORITY (VRA)

Forecast Sources and Applications of Funds, 1/ 1959 through 1977

(in thousands of ₵)

Fiscal Year Ending December 31,	1969	1970	1971	1972	1973	1974	1975	1976	1977	Subtotal 1969-1972	Total 1969-1977
SOURCES OF FUNDS											
Internal Cash Generation											
Operating Income	4,447	5,137	6,004	6,789	8,419	9,464	10,135	10,828	11,003	22,377	72,226
Depreciation	3,623	3,713	3,807	4,241	4,262	4,284	4,306	4,326	5,650	15,454	38,282
Total	8,110	8,850	9,811	11,030	12,681	13,748	14,441	15,154	16,653	37,831	110,508
Equity											
Canadian Grant	100	150	76	-	-	-	-	-	-	326	326
Borrowings											
Proposed IBRD Loan	337	2,145	2,435	1,203	-	-	-	-	-	6,120	6,120
IBRD Loan 310-GH	135	-	-	-	-	-	-	-	-	135	135
US AID	214	184	184	82	-	-	-	-	-	664	664
Canadian Loan	650	2,820	3,472	817	-	-	-	-	-	7,759	7,759
Italian Loan	-	370	700	679	-	-	-	-	-	1,749	1,749
Future Expansion Loan	-	-	-	3,075	8,450	11,500	5,450	3,425	2,400	3,075	31,300
Total	1,336	5,519	6,791	5,856	8,450	11,500	5,450	3,425	2,400	19,502	50,727
TOTAL SOURCES	9,576	14,519	16,678	16,886	21,131	25,248	19,891	18,579	19,053	57,659	161,561
APPLICATIONS OF FUNDS											
Construction Program											
	2,619	6,720	9,157	7,948	10,850	15,900	10,350	5,325	4,250	26,444	73,119
Debt Service											
Interest											
Proposed IBRD Loan	3	92	240	359	398	398	398	398	398	694	2,684
IBRD Loan 310-GH	2,568	2,479	2,385	2,285	2,179	2,067	1,949	1,823	1,691	9,717	19,426
US AID	755	729	702	679	651	621	589	557	523	2,865	5,806
US Exim-Bank	424	393	362	331	300	269	238	208	178	1,510	2,703
UK E.C.G.D.	148	88	53	40	-	-	-	-	-	329	329
Canadian Loan	2	51	130	184	194	194	193	187	181	367	1,316
Italian Loan	-	11	43	85	105	101	91	79	67	139	582
Future Expansion Loan	-	-	-	100	475	1,124	1,674	1,962	2,216	100	7,551
Total	3,900	3,843	3,915	4,063	4,302	4,774	5,132	5,214	5,254	15,721	40,397
Amortisation											
IBRD Loan 310-GH	1,465	1,550	1,642	1,738	1,838	1,946	2,059	2,180	2,306	6,395	16,724
US AID	393	759	786	809	837	866	897	928	962	2,747	7,237
US Exim-Bank	537	537	537	537	537	537	537	537	537	2,148	4,833
UK E.C.G.D.	637	637	637	637	42	-	-	-	-	2,548	2,590
Canadian Loan	-	-	-	-	-	-	227	233	239	-	699
Italian Loan	-	-	-	-	-	177	187	199	211	-	774
Future Expansion Loan	-	-	-	-	-	-	-	-	872	-	872
Total	3,032	3,483	3,602	3,721	3,254	3,526	3,907	4,077	5,127	13,838	33,729
Total Debt Service	6,932	7,326	7,517	7,784	7,556	8,300	9,039	9,291	10,381	29,559	74,126
Dividends				1,000	2,500	1,000	-	3,500	4,000	1,000	12,000
Variation in Working Capital											
Securities, Banks and Cash	-	123	-	84	175	48	202	363	172	207	1,167
Other Items (net)	25	350	4	70	50	-	300	100	250	449	1,149
Net Increase (Decrease)	25	473	4	154	225	48	502	463	422	656	2,316
TOTAL APPLICATIONS	9,576	14,519	16,678	16,886	21,131	25,248	19,891	18,579	19,053	57,659	161,561
Times Total Debt Service covered annually by Internal Cash Generation		1.2	1.3	1.4	1.7	1.7	1.6	1.6	1.6	1.3	1.5

1/ Power operations only.

April 24, 1959

REPUBLIC OF GHANA
VOLTA RIVER AUTHORITY (VRA)
Actual and Forecast Balance Sheets, 1/ 1965-1977

As of December 31,	ACTUAL				FORECAST								
	1965	1966	1967	1968 2/	1969	1970	1971	1972	1973	1974	1975	1976	1977
ASSETS													
Fixed Assets in Operation	106,127	114,903	145,040	145,853	147,722	148,522	152,443	169,956	170,806	171,706	172,556	173,381	226,323
Less: Depreciation	(122)	(250)	(4,082)	(7,559)	(11,252)	(14,965)	(18,776)	(23,025)	(27,295)	(31,587)	(35,901)	(40,235)	(45,893)
Net Fixed Assets in Operation	106,005	114,653	140,958	138,294	136,470	133,557	133,667	146,931	143,511	140,119	136,655	133,146	180,430
Work in Progress	536	211	1,039	769	1,525	7,609	13,274	4,457	14,932	31,056	42,230	48,692	-
Total Fixed Assets	106,541	114,864	141,997	139,063	137,995	141,166	146,941	151,388	158,443	171,175	178,885	181,838	180,430
Non Project Expenditures	12,567	13,278	14,143	-	-	-	-	-	-	-	-	-	-
Less: Government Contribution	(12,567)	(13,278)	(14,143)	-	-	-	-	-	-	-	-	-	-
Current Assets	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventories	282	472	653	732	750	750	750	750	900	900	1,000	1,000	1,250
Accounts Receivable: Power	354	518	865	1,000	1,000	1,000	1,100	1,100	1,100	1,150	1,250	1,350	1,450
Accounts Receivable: Other	304	422	647	1,078	1,100	1,100	900	800	750	650	650	550	450
Securities, Banks and Cash	2,114	2,348	1,561	2,338	2,338	2,461	2,545	2,720	2,720	2,768	2,970	3,333	3,505
Total	3,054	3,790	3,726	5,148	5,188	5,311	5,241	5,295	5,520	5,568	5,870	6,233	6,655
TOTAL ASSETS	109,595	118,654	145,723	144,211	143,183	146,477	152,182	156,683	163,963	176,743	184,755	188,071	187,085
LIABILITIES													
Equity													
Republic of Ghana Investment	58,833	59,218	58,354	58,446	58,546	58,696	58,772	58,772	58,772	58,772	58,772	58,772	58,772
Revaluation and Exchange Difference	-	-	5,600	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738
Reserves and Surplus	420	2,746	(1,336)	(1,101)	(550)	908	3,422	5,888	7,972	12,778	19,447	23,525	25,256
Total	59,253	60,964	62,618	63,081	63,734	65,342	67,932	70,398	72,482	77,288	83,957	88,025	89,766
Long Term Debt													
Proposed IBRD Loan	-	-	-	-	337	2,482	4,917	6,120	6,120	6,120	6,120	6,120	6,120
IBRD Loan 310-GH	28,354	32,330	46,231	44,974	43,559	41,917	40,179	38,341	36,395	34,336	32,156	29,850	27,411
US AID	8,930	14,190	21,561	21,690	21,445	20,543	19,918	19,163	18,297	17,400	16,472	15,510	14,514
US Exim-Bank	5,910	5,722	7,617	7,101	6,564	6,027	5,490	4,953	4,416	3,879	3,342	2,805	2,268
UK E.C.G.D.	2,600	2,540	2,548	1,953	1,316	679	42	-	-	-	-	-	-
Canadian Loan	-	-	-	-	650	3,470	6,942	7,759	7,759	7,532	7,299	7,060	6,815
Italian Loan	-	-	-	-	-	370	1,070	1,749	2,572	1,385	1,186	975	752
Future Expansion Loan	-	-	-	-	-	-	-	3,075	11,525	23,025	28,475	31,028	32,499
Total	45,794	54,782	77,957	75,718	73,571	75,188	78,558	81,160	86,084	93,677	95,050	93,348	90,379
Current Liabilities													
Accounts Payable and Accruals	4,512	2,424	2,534	2,380	2,395	2,045	1,971	1,871	1,871	1,871	1,671	1,571	1,571
Current Portion of Long Term Debt	36	404	2,614	3,032	3,483	3,602	3,721	3,254	3,526	3,907	4,077	5,127	5,369
Total	4,548	2,908	5,148	5,412	5,878	5,647	5,692	5,125	5,397	5,778	5,748	6,698	6,940
TOTAL LIABILITIES	109,595	118,654	145,723	144,211	143,183	146,477	152,182	156,683	163,963	176,743	184,755	188,071	187,085
Debt as % of Total Capitalisation	44	47	56	56	55	55	55	55	55	56	54	53	52
Current Assets to Current Liabilities	.7	1.3	.8	1.0	.9	.9	.9	1.0	1.0	1.0	1.0	.9	1.0

1/ Power operations only.
2/ Preliminary figures, subject to audit.

April 24, 1969

ANNEX 3

GHANA

VOLTA RIVER AUTHORITY

LOAN 618-GH

VOLTA EXPANSION PROJECT

PROGRESS REPORTS

A. GENERAL

1. Quarterly Progress Reports

These reports, covering (a) technical progress and (b) cost estimates, should be sent to the Bank to arrive in Washington not later than thirty days after the end of each calendar quarter. Each quarterly report should contain a summary of, and comments on, the progress of the Project and the prospects. The first report in the format described below should cover the three-month period ending December 31, 1970.

2. Completion Report

This report should be submitted after all works included in the Project have been completed.

B. CONTENTS OF QUARTERLY PROGRESS REPORT

1. Technical Progress Report

- (a) Progress should be reported on each item as listed in Exhibit D - Cost Estimate and Financing Arrangements.
- (b) The reports should include explanations of, and comments on:
 - (i) Actual and expected changes of substance from original designs and/or schedules;
 - (ii) actual or expected difficulties or delays, measures to correct them, and probable effects on construction;
 - (iii) revisions of estimated dates of completion of any part of the Project;
 - (iv) actual or expected delays in delivery of major items of equipment with reasons for delays and estimated effects on construction;
 - (v) changes that might affect the cost of the Project;
 - (vi) changes in key personnel; and
 - (vii) unusual occurrences.

- (c) Charts similar to Exhibits A and B covering the main items in the Project should be included in each quarterly report. The curves shown in Exhibit A charts should cover the entire 1969-1972 program and the actual progress should be plotted against the estimated time curve to completion. Exhibit B illustrates a Construction Schedule Bar Chart which should be designed to show separately the scheduled and actual progress of the Project.
- (d) Photographs (identified and dated) should be included where appropriate to supplement the reports on the progress of work and/or difficulties which have occurred.
- (e) A schedule of major orders and deliveries similar to Exhibit C should be included. The purpose of the schedule is to indicate progress of delivery of the main items of equipment and to show delays in delivery. Only major items of equipment need be shown on this schedule.

2. Project Cost Estimate and Expenditure Reports

Exhibits D and E which are self-explanatory, are illustrations of the type of reports requested. Substantial revisions in the estimated costs should be accompanied by explanatory notes included in the technical progress report (see 1 (b) (v) above).

C. COMPLETION REPORT

When all work on the whole Project has been completed a final completion report should be submitted together with a Statement of the Final Costs in the same detail as shown in the cost estimate Exhibit D.

PART II - Reports on Financing and Operations

The purpose of the reports listed below is to keep the Bank informed of the operations, financial position and prospects of the Authority, and of its performance in respect of the financial covenants in the Loan Agreement with the Bank. They should be submitted by a responsible officer of VRA. The first reports should cover the fiscal year ending December 31, 1970.

1. Quarterly Financial and Operations Report

These reports should be sent to the Bank in time to arrive not later than April 15, August 15, October 15, and February 15 of each year and should include:

- (a) Income statement of VRA's power operations for the quarter under review compared with the results of the previous quarter and the budget of the current year, in the form similar to the Income Statement shown in Exhibit G.

- (b) Comparative balance sheets of VRA's power operations as of March 31, June 30, September 30 and December 31 of the current year and the previous quarters, in a form similar to the Balance Sheets shown in Exhibit I.
- (c) Brief comments on the significant factors explaining any improvement or deterioration in results for the current year as compared with the previous quarters and the budget.

2. Annual Comparison of Actual and Forecast Operations and Finances

The report outlined below should compare the actual performance and revised prospects of VRA at the time of review, with the estimates prepared at the time of the appraisal, and with the minimum performance requirements of the financial covenants in the Loan Agreement.

To facilitate comparison the report should, until further notice, cover the same period as forecast in the appraisal report, i.e. the years 1969-1977. It should be submitted at least once a year within six months of the close of the fiscal year, and at the initiative of VRA at any other time when a major change in circumstances (such as significant increase in cost estimates, currency devaluation, etc.) would warrant a general review of VRA's financial condition and prospects.

The report should include the following four statements in the form and for the period shown in Exhibits F through I: Balance Sheet (I) (VRA power operations); Sources and Application of Funds (H); Income Statement (G); and Generation, Sales, Maximum Demand and Revenues (K).

The report should also contain appropriate textual comments, covering in particular the following points:

- (a) Actual performance under the rate of return covenant, in the year completed, and estimated performance in the current year.
- (b) The borrowing margin available under the existing debt limitation covenant at the end of both the last actual fiscal year, and the current year (as estimated); this statement would be indicative only, and would not substitute for the test to be made at the time it is proposed to incur new debt.
- (c) Explanations and comments on significant departures from original estimates, and in new facts and assumptions regarding such matters as: Sales, accounts receivable, tariffs, operating expenses, construction program and cost estimates, outside sources of funds, debt service, dividends, etc.

3. Audited Financial Statements

The Auditors' Report should also be received annually within six months of the end of the fiscal year. It should include a description of the scope of the auditor's examination, notes and comments supporting the auditor's opinion and the certified financial statements.

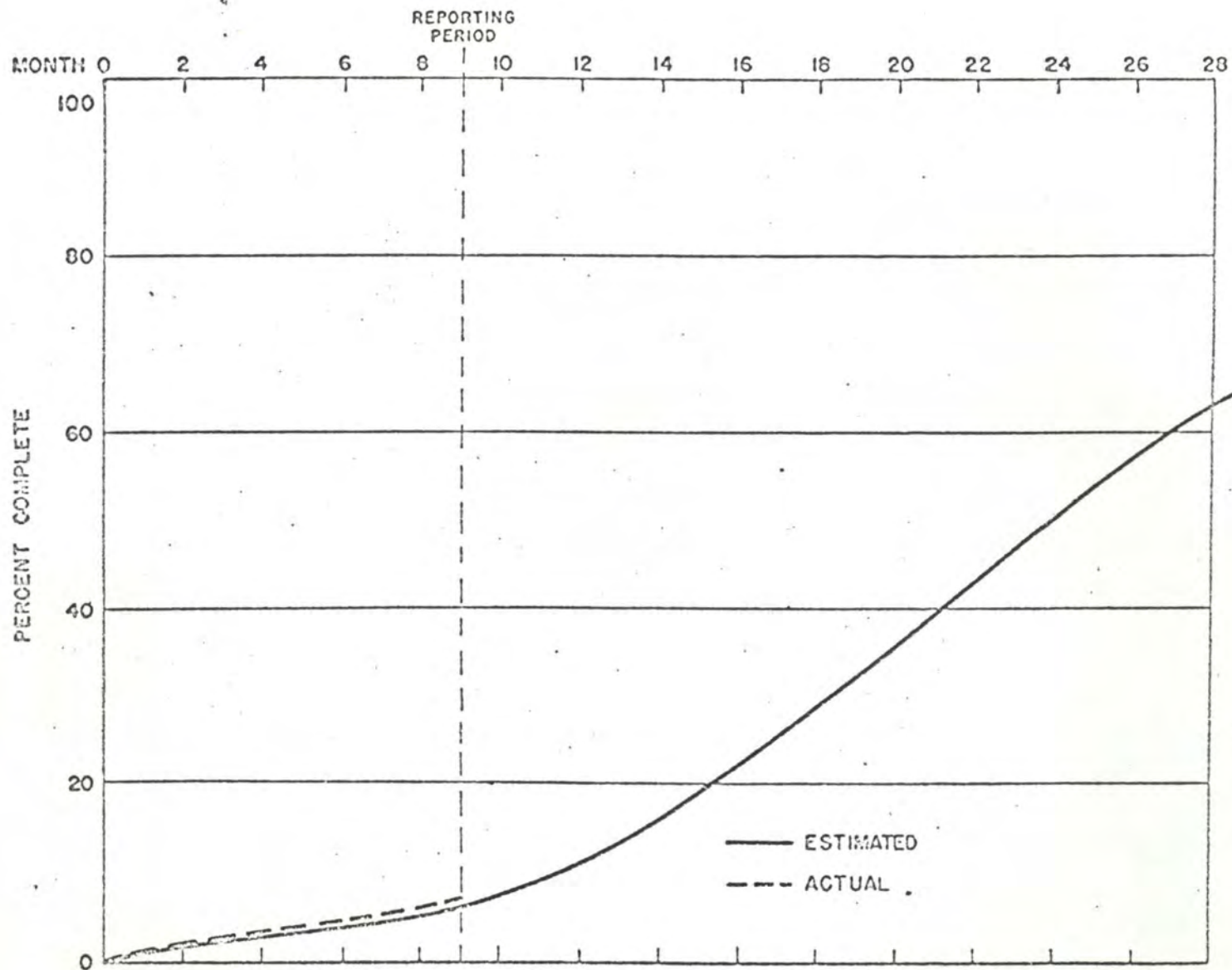
EXHIBITS ATTACHED

EXHIBIT

- A Schedule and Actual Progress Chart
- B Construction Schedule Bar Chart
- C Schedule of Orders and Deliveries
- D Cost Estimate and Financing Arrangements
Expansion Program 1969-1972
- E Cost Estimate Portion of Progress
Financed by Loan 618-GH
- F Expenditure and Commitment Statement
- G Income Statements
- H Sources and Applications of Funds
- I Balance Sheets
- K Load and Sales Statistics

SCHEDULED & ACTUAL PROGRESS

COMPLETE PROJECT



NOTE: Percentages should either be based on actual manhours or a Resident Engineers estimate.

CONSTRUCTION SCHEDULE
Suggested method for presentation

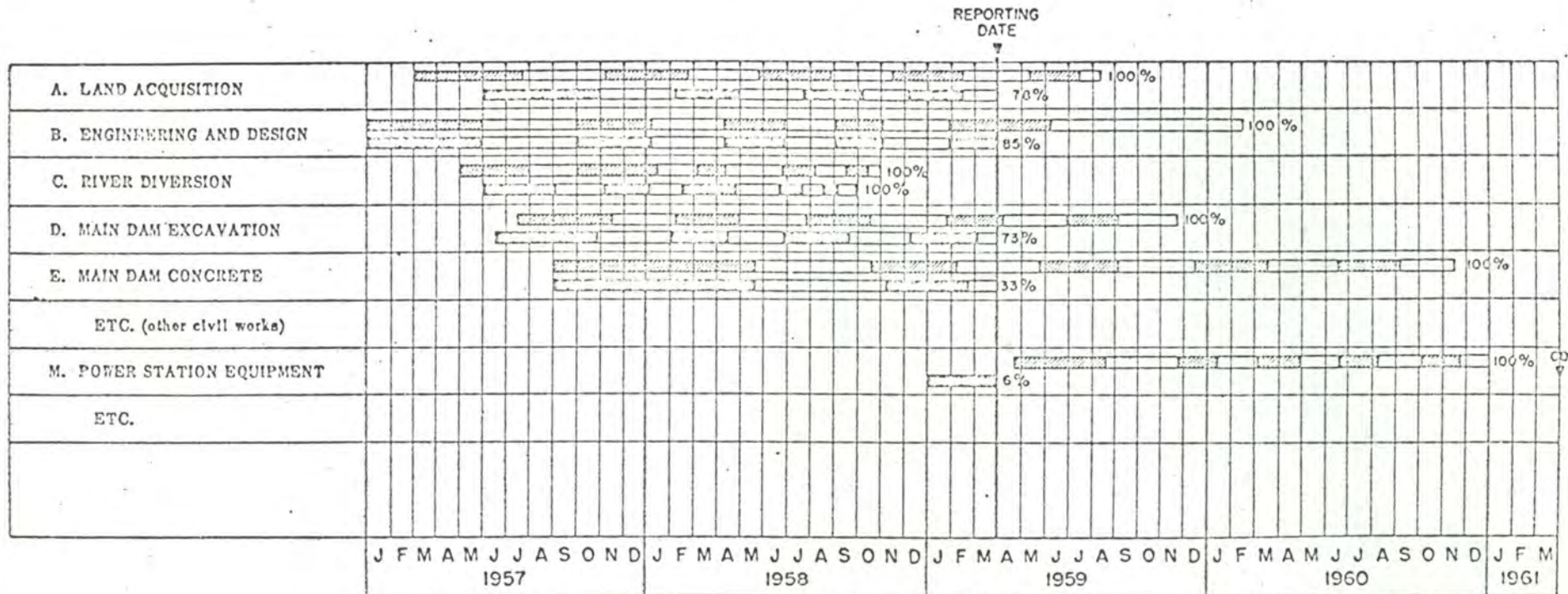


Chart Key. Scheduled work programs for each item in the schedule are shown on a line scale by a double line divided into alternately hatch shaded sections [-----], each section representing 10% of the physical work to be performed. As work need not be scheduled for even distribution in time, the length of sections of a bar need not be uniform even though each represents equal amounts of work. Actual progress is shown by a parallel double line similarly divided into alternately full shaded sections [=====], each also representing 10% of the work. The percentage completion at the reporting date is given at the right hand end of progress lines. Commissioning dates are indicated by the symbol CD.

- Notes.**
- The Chart Key should be printed on all construction schedule forms so as not to require reference to previous copies.
 - The examples given above of hypothetical bar lines illustrate the following situations:
 - Work started three months behind schedule, but it is 3%, or approximately one month, ahead of schedule at the reporting date.
 - Work started on schedule, has been proceeding at a rhythm exactly as programmed, and is on schedule at the reporting date.
 - Work started one month behind schedule, and was completed one month ahead of schedule.
 - Work started one month ahead of schedule, and it is 5%, or approximately five weeks, ahead of schedule at the reporting date.
 - Work started on schedule, and is 2%, or approximately two weeks, behind schedule at the reporting date.
 - Work started about four months ahead of schedule.
 - In case scheduled programs should be revised, the first report being prepared after such revision goes into effect should show both the bar program being abandoned and the new one being adopted in its place. The reasons for such changes, and estimates of their effect on the overall completion of the project should be stated in the text of the report.

PROGRESS REPORT
Month of _____

GHANA
 VOLTA RIVER AUTHORITY
 LOAN 618-GH
 VOLTA EXPANSION PROJECT

SCHEDULE OF ORDERS AND DELIVERIES OF MAIN ITEMS OF EQUIPMENT

Report for period ended: _____

	<u>Date of Order</u>	<u>Name and Address of Supplier</u>	<u>Original Delivery Date</u>		<u>Revised Date</u>	<u>Actual Delivery</u>	<u>Remarks</u>
			<u>Start</u>	<u>Complete</u>	<u>Complete</u>	<u>Date</u>	
GENERATORS	UNIT 5 UNIT 6						
MAIN TRANSFORMERS	UNIT 5 UNIT 6						
TURBINES	UNIT 5 UNIT 6						
<u>SWITCHGEAR</u>							
		Akosombo					
		Volta (Tema)					
		Achimota					
		Tema					
		Sekondi-Takoradi					
		Cape Coast					
		Kumasi					
<u>STEP-DOWN TRANSFORMERS</u>							
		Smelter					
		Tema					
		Achimota					
		Sekondi-Takoradi					
		Kumasi					
		Cape Coast					
<u>TRANSMISSION LINES</u>							
		Togo-Dahomey					
		Akosombo-Volta					
		(3rd Double Circuit)					
		Volta-Smelter					

September 1, 1970.

GHANA

VOLTA RIVER AUTHORITY

PERIOD OF 1969-1972 PROGRAM TO BE FINANCED BY LOAN 618-GH

COST ESTIMATE (THOUSANDS OF US\$)

	ORIGINAL COST ESTIMATE			PREVIOUS REVISIONS			REVISIONS IN QUARTER			TOTAL REVISIONS			TOTAL CURRENT ESTIMATE		
	Foreign (1)	Local (2)	Total (3)	Foreign (4)	Local (5)	Total (6)	Foreign (7)	Local (8)	Total (9)	Foreign (10) (4)+(7)	Local (11) (5)+(8)	Total (12) (6)+(9)	Foreign (13) (1)+(10)	Local (14) (2)+(11)	Total (15) (3)+(12)
A. AKOSOMBO 5TH AND 6TH UNITS															
1. Turbines and Governors	2,080	-	2,080												
2. Ancillary Mech. Equip.	260	30	290												
3. Installation of Turbines	700	300	1,000												
4. Civil Works	500	205	705												
5. Sub-Total	3,540	535	4,075												
B. SUBSTATIONS															
6. Volta (Tema)	185	15	200												
7. Smelter	465	40	505												
8. ECG Substations	1,100	100	1,200												
9. Sub-Total	1,750	155	1,905												
C. MISCELLANEOUS															
10. Service Vehicles	150	-	150												
11. Improvements	300	100	400												
12. Sub-Total	450	100	550												
D. CONSULTING SERVICES															
13. Management and Training	105	45	150												
14. Future Expansion	250	100	350												
15. Sub-Total	355	145	500												
TOTAL	6,095	935	7,030												
Less Undisbursed Balance Loan 310-GH	(95)														
TOTAL LOAN 618-GH	6,000														
ALLOCATION OF PROCEEDS OF LOAN															
A. Turbines, Governors, Ancillary Mech. Equip. and Civil Works	3,100														
B. Substations	1,550														
C. Service Vehicles	150														
D. Consulting and Training Service	350														
E. Miscellaneous Works	300														
F. Unallocated	550														
TOTAL	6,000														

September 1, 1970

REPUBLIC OF GHANA
VOLTA RIVER AUTHORITY (VRA)

Actual and Forecast Income Statements, ^{1/} 1965-1977
(in thousands of ₵, unless otherwise indicated)

Fiscal Year ending December 31,	ACTUAL				FORECAST								
	1965	1966	1967	1968 ^{2/}	1969	1970	1971	1972	1973	1974	1975	1976	1977
Energy sold, in GWh	98.2	449.7	1,453.9	2,428.1	2,497.0	2,596.2	2,738.3	3,079.0	3,569.4	3,850.4	3,959.0	4,070.4	4,653.4
Average revenue per kwh, in ₵	.73	.69	.42	.39	.40	.41	.43	.42	.42	.42	.43	.44	.43
Operating Revenues													
Sales of Energy	713	3,085	6,075	9,482	9,955	10,746	11,804	13,216	14,961	16,128	16,921	17,734	19,893
Other	-	155	153	227	150	150	150	150	150	150	150	150	150
Total	713	3,240	6,228	9,709	10,105	10,896	11,954	13,366	15,111	16,278	17,071	17,884	20,043
Operating Expenses													
Salaries and wages	143	714	833	853	895	940	990	1,085	1,140	1,200	1,260	1,320	1,740
Materials	-	-	185	135	140	150	160	200	200	200	200	200	350
Transportation	34	357	241	266	280	290	300	320	330	340	350	360	400
General charges	108	715	253	305	320	336	353	371	390	410	430	450	475
Akosombo Administration (net)	-	-	311	200	200	200	200	220	220	230	240	250	250
Hospital & Health Administration (net)	-	-	29	126	130	130	140	140	150	150	150	150	175
Depreciation	8	128	3,455	3,542	3,693	3,713	3,811	4,249	4,270	4,292	4,314	4,334	5,658
Total	293	1,914	5,307	5,427	5,658	5,759	5,954	6,585	6,700	6,822	6,944	7,064	9,048
Operating Income	420	1,326	921	4,282	4,447	5,137	6,000	6,781	8,411	9,456	10,127	10,820	10,995
Interest	1,848	3,312	4,003	4,049	3,900	3,843	3,915	4,063	4,302	4,774	5,132	5,214	5,254
Less: Interest charged to plant	(1,848)	(3,312)	-	-	(6)	(164)	(429)	(748)	(475)	(1,124)	(1,674)	(1,962)	-
Total	-	-	4,003	4,049	3,894	3,679	3,486	3,315	3,827	3,650	3,458	3,252	5,254
Net Income (Loss)	420	1,326	(3,082)	233	553	1,458	2,514	3,466	4,584	5,806	6,669	7,568	5,741
Return on Equity, %		2.2	-	.4	.9	2.3	3.9	5.1	6.5	8.0	8.6	9.0	6.5
Return on Average Net Fixed Assets in Operation plus Working Capital Allowance, %		1.2	.7	3.1	3.2	3.8	4.5	4.8	5.8	6.7	7.3	8.0	7.0

^{1/} Power operations only.

^{2/} Preliminary figures, subject to audit.

April 24, 1969

EXHIBIT G

REPUBLIC OF GHANA

VOLTA RIVER AUTHORITY (VRA)

Forecast Sources and Applications of Funds, 1/ 1969 through 1977

(in thousands of ₵)

Fiscal Year Ending December 31,	1969	1970	1971	1972	1973	1974	1975	1976	1977	Subtotal 1969-1972	Total 1969-1977
SOURCES OF FUNDS											
Internal Cash Generation											
Operating Income	4,447	5,137	6,004	6,789	8,419	9,464	10,135	10,828	11,003	22,377	72,226
Depreciation	<u>3,693</u>	<u>2,713</u>	<u>2,807</u>	<u>4,241</u>	<u>4,262</u>	<u>4,284</u>	<u>4,306</u>	<u>4,326</u>	<u>5,650</u>	<u>15,454</u>	<u>38,282</u>
Total	8,140	8,850	9,811	11,030	12,681	13,748	14,441	15,154	16,653	37,831	110,508
Equity											
Canadian Grant	100	150	76	-	-	-	-	-	-	326	326
Borrowings											
Proposed IBRD Loan	337	2,145	2,435	1,203	-	-	-	-	-	6,120	6,120
IBRD Loan 310-GH	135	-	-	-	-	-	-	-	-	135	135
US AID	214	184	184	82	-	-	-	-	-	664	664
Canadian Loan	650	2,820	3,472	817	-	-	-	-	-	7,759	7,759
Italian Loan	-	370	700	679	-	-	-	-	-	1,749	1,749
Future Expansion Loan	-	-	-	<u>3,075</u>	<u>8,450</u>	<u>11,500</u>	<u>5,450</u>	<u>3,425</u>	<u>2,400</u>	<u>3,075</u>	<u>24,300</u>
Total	1,336	5,519	6,791	5,856	8,450	11,500	5,450	3,425	2,400	19,502	50,727
TOTAL SOURCES	<u>9,576</u>	<u>14,519</u>	<u>16,678</u>	<u>16,886</u>	<u>21,131</u>	<u>25,248</u>	<u>19,891</u>	<u>18,579</u>	<u>19,053</u>	<u>57,659</u>	<u>161,561</u>
APPLICATIONS OF FUNDS											
Construction Program	2,619	6,720	9,157	7,948	10,850	15,900	10,350	5,325	4,250	26,444	73,119
Debt Service											
Interest											
Proposed IBRD Loan	3	92	240	359	398	398	398	398	398	694	2,604
IBRD Loan 310-GH	2,568	2,479	2,385	2,285	2,179	2,067	1,949	1,823	1,691	9,717	19,426
US AID	755	729	702	679	651	621	589	557	523	2,865	5,806
US Exim-Bank	424	393	362	331	300	269	238	208	178	1,510	2,703
UK E.C.G.D.	148	88	53	40	-	-	-	-	-	329	329
Canadian Loan	2	51	130	184	194	194	193	187	181	367	1,316
Italian Loan	-	11	43	85	105	101	91	79	67	139	582
Future Expansion Loan	-	-	-	<u>100</u>	<u>475</u>	<u>1,124</u>	<u>1,674</u>	<u>1,962</u>	<u>2,216</u>	<u>100</u>	<u>7,551</u>
Total	3,900	3,843	3,915	4,063	4,302	4,774	5,132	5,214	5,254	15,721	40,397
Amortization											
IBRD Loan 310-GH	1,465	1,550	1,642	1,738	1,838	1,946	2,059	2,180	2,306	6,395	16,724
US AID	393	759	786	809	837	866	897	928	962	2,747	7,237
US Exim-Bank	537	537	537	537	537	537	537	537	537	2,148	4,833
UK E.C.G.D.	637	637	637	637	42	-	-	-	-	2,548	2,590
Canadian Loan	-	-	-	-	-	-	227	233	239	-	699
Italian Loan	-	-	-	-	-	177	187	199	211	-	774
Future Expansion Loan	-	-	-	-	-	-	-	-	872	-	872
Total	3,032	3,483	3,602	3,721	3,254	3,526	3,907	4,077	5,127	13,838	33,729
Total Debt Service	6,932	7,326	7,517	7,784	7,556	8,300	9,039	9,291	10,381	29,559	74,126
Dividends				1,000	2,500	1,000	-	3,500	4,000	1,000	12,000
Variation in Working Capital											
Securities, Banks and Cash	-	123	-	84	175	48	202	363	172	207	1,167
Other Items (net)	25	350	4	70	50	-	300	100	250	449	1,149
Net Increase (Decrease)	<u>25</u>	<u>473</u>	<u>4</u>	<u>154</u>	<u>225</u>	<u>48</u>	<u>502</u>	<u>463</u>	<u>422</u>	<u>656</u>	<u>2,316</u>
TOTAL APPLICATIONS	<u>9,576</u>	<u>14,519</u>	<u>16,678</u>	<u>16,886</u>	<u>21,131</u>	<u>25,248</u>	<u>19,891</u>	<u>18,579</u>	<u>19,053</u>	<u>57,659</u>	<u>161,561</u>
Times Total Debt Service covered annually by Internal Cash Generation		1.2	1.3	1.4	1.7	1.7	1.6	1.6	1.6	1.3	1.5

1/ Power operations only.

April 24, 1969

REPUBLIC OF GHANA
VOLTA RIVER AUTHORITY (VRA)
 Actual and Forecast Balance Sheets, ^{1/} 1965-1977

As of December 31,	ACTUAL				FORECAST								
	1965	1966	1967	1968 2/	1969	1970	1971	1972	1973	1974	1975	1976	1977
ASSETS													
Fixed Assets in Operation	106,127	114,903	145,040	145,853	147,722	148,522	152,443	169,956	170,806	171,706	172,556	173,381	226,323
Less: Depreciation	(122)	(250)	(4,082)	(7,559)	(11,252)	(14,965)	(18,776)	(23,025)	(27,295)	(31,587)	(35,901)	(40,235)	(45,893)
Net Fixed Assets in Operation	106,005	114,653	140,958	138,294	136,470	133,557	133,667	146,931	143,511	140,119	136,655	133,146	180,430
Work in Progress	536	211	1,039	769	1,525	7,609	13,274	4,457	14,932	11,056	42,230	48,692	-
Total Fixed Assets	106,541	114,864	141,997	139,063	137,995	141,166	146,941	151,388	158,443	171,175	178,885	181,838	180,430
Non Project Expenditures	12,567	13,278	14,143	-	-	-	-	-	-	-	-	-	-
Less: Government Contribution	(12,567)	(13,278)	(14,143)	-	-	-	-	-	-	-	-	-	-
Current Assets													
Inventories	282	472	653	732	750	750	750	750	900	900	1,000	1,000	1,250
Accounts Receivable: Power	354	548	865	1,000	1,000	1,000	1,100	1,100	1,100	1,150	1,250	1,350	1,450
Accounts Receivable: Other	304	422	647	1,078	1,100	1,030	900	800	800	750	650	550	450
Securities, Banks and Cash	2,114	2,348	1,561	2,338	2,338	2,461	2,461	2,545	2,720	2,768	2,970	3,333	3,505
Total	3,054	3,790	3,726	5,148	5,188	5,311	5,241	5,295	5,520	5,568	5,870	6,233	6,655
TOTAL ASSETS	109,595	118,654	145,723	144,211	143,183	146,477	152,182	156,683	163,963	176,743	184,755	188,071	187,085
LIABILITIES													
Equity													
Republic of Ghana Investment	58,833	59,218	58,354	58,446	58,546	58,696	58,772	58,772	58,772	58,772	58,772	58,772	58,772
Revaluation and Exchange Difference	-	-	5,600	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738
Reserves and Surplus	420	1,746	(2,336)	(1,103)	(550)	908	3,422	5,888	7,972	12,778	19,447	23,515	25,256
Total	59,253	60,964	61,618	63,081	63,734	65,342	67,932	70,398	72,482	77,288	83,957	88,025	89,766
Long Term Debt													
Proposed IBRD Loan	-	-	-	-	337	2,482	4,917	6,120	6,120	6,120	6,120	6,120	6,120
IBRD Loan 310-GH	28,354	32,330	46,231	44,974	43,559	41,917	40,179	38,341	36,395	34,336	32,156	29,850	27,411
US AID	8,930	14,190	21,561	21,690	22,245	20,583	19,918	19,163	18,297	17,400	16,472	15,510	14,514
US Exim-Bank	5,910	5,722	7,617	7,101	6,564	6,027	5,490	4,953	4,416	3,879	3,342	2,806	2,268
UK E.C.G.D.	2,600	2,540	2,548	1,953	1,316	679	42	-	-	-	-	-	-
Canadian Loan	-	-	-	-	650	3,470	6,942	7,759	7,759	7,532	7,299	7,060	6,815
Italian Loan	-	-	-	-	-	370	1,070	1,749	1,572	1,385	1,186	975	752
Future Expansion Loan	-	-	-	-	-	-	-	3,075	11,525	23,025	28,475	31,028	32,499
Total	45,794	54,782	77,957	75,718	73,571	75,488	78,558	81,160	86,084	93,677	95,050	93,348	90,379
Current Liabilities													
Accounts Payable and Accruals	4,512	2,424	2,534	2,380	2,395	2,045	1,971	1,871	1,871	1,871	1,671	1,571	1,571
Current Portion of Long Term Debt	36	484	2,614	3,032	3,483	3,602	3,721	3,254	3,526	3,907	4,077	5,127	5,369
Total	4,548	2,908	5,148	5,412	5,878	5,647	5,692	5,125	5,397	5,778	5,748	6,698	6,940
TOTAL LIABILITIES	109,595	118,654	145,723	144,211	143,183	146,477	152,182	156,683	163,963	176,743	184,755	188,071	187,085
Debt as % of Total Capitalisation	44	47	56	56	55	55	55	55	55	56	54	53	52
Current Assets to Current Liabilities	.7	1.3	.8	1.0	.9	.9	.9	1.0	1.0	1.0	1.0	.9	1.0

^{1/} Power operations only.
^{2/} Preliminary figures, subject to audit.

April 24, 1969

EXHIBIT I

GHANA
VOLTA RIVER AUTHORITY
VOLTA EXPANSION PROJECT
GENERATION, SALES, MAXIMUM DEMAND AND REVENUES

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
	A C T U A L						F O R E C A S T						
<u>GENERATION (Gwh)</u>													
<u>SALES (Gwh)</u>													
VALCO													
ECG													
Mines													
Akosombo Township													
Akosombo Textiles													
Others													
Togo and Dahomey													
TOTAL													
<u>STATION USE AND LOSSES (Gwh)</u>													
Station Use													
Transmission Losses													
TOTAL													
AS PERCENT OF TOTAL GENERATION													
<u>MAXIMUM DEMAND (MW)</u>													
<u>ANNUAL PEAK SYSTEM DEMAND (Diversified)</u>													
VALCO													
ECG													
Mines													
Akosombo Township													
Akosombo Textiles													
Others													
Togo and Dahomey													
TOTAL (non-diversified)													
<u>DIVERSITY FACTOR</u>													
<u>AVERAGE ANNUAL LOAD FACTOR</u>													
VALCO													
ECG													
Mines													
Akosombo Township													
Akosombo Textiles													
Others													
Togo and Dahomey													
TOTAL													
<u>REVENUES (in thousands of N\$)</u>													
VALCO													
ECG													
Mines													
Akosombo Township													
Akosombo Textiles													
Others													
Togo and Dahomey													
TOTAL													
<u>AVERAGE REVENUE/kWh SOLD (in NP/kWh)</u>													
VALCO													
ECG													
Mines													
Akosombo Township													
Akosombo Textiles													
Others													
Togo and Dahomey													
TOTAL													

OFFICE MEMORANDUM

TO: Files

DATE: August 27, 1970

FROM: H. J. Nissenbaum *HJN*

SUBJECT: Canadian Financing - VRA Requirements

Mr. Noble Power of the Canadian International Development Agency called today to report favorable progress on the proposed Canadian financing of the outstanding VRA requirement, i.e., the financing of the 5 transformers estimated to cost N\$1.1 million. Mr. Power reported that the Canadian Interministerial Committee had approved his recommendation for CIDA financing of this proposal. He said that the final determination would be made by the head of CIDA at the very near future and that he expected this approval to be assured.

HJNissenbaum:crm

cc - Messrs. Minnig
Wyatt
Memon

6186H

Mr. Gavin E. Wyatt

August 26, 1970

Ali N. Memon

GHANA - Loan 618-GH
Volta River Authority (VRA)
Operating Results 1969

1. The audited statements of VRA and the auditor's report which were due on June 30, 1970 have not as yet been received. A reminder is being sent. Following are the operating results based on unaudited financial statements.
2. Revenue increased from N~~9~~9.8 million in 1968 to N~~10~~10.8 million in 1969 by approximately 10%. Operating expenses for transmission, administration, Akosombo township and health and safety increased while those for generation and depreciation decreased. The small decrease in depreciation from N~~3~~3.4 million in 1968 to N~~3~~3.3 million in 1969 may be due to a change in the depreciation policy which was envisaged at the time of last appraisal. Total operating expenses remained unchanged at N~~5~~5.4 million. Loan interest and commitment charges decreased from N~~4~~4.1 million in 1968 to N~~3~~3.9 million in 1969. Profit for the year increased from N~~0~~0.4 million to N~~1~~1.5 million. The return on the Government's investment increased from 0.5% to 2.3% as compared to 0.9% estimated for 1969 at the time of appraisal and the target 8% to be achieved by 1974.
3. Accounts receivable increased from N~~2~~2.0 million or 2.5 months' sales in 1968 to N~~2~~2.3 million or 2.6 months' sales in 1969 which is still reasonable. Ratio of the current assets to the current liabilities improved from 2.1 to 2.4.
4. On the whole VRA's operating results for 1969 and the financial position as of December 31, 1969 were satisfactory.
5. It is recommended that the next supervision mission should look into reasons for the decrease in depreciation during 1969 and obtain details of any recent change in the depreciation policy.

ANMemon:jmca
IBRD

cc: Messrs. Nissenbaum, Minnig & Memon
Central Files
Division Files

61864

August 13, 1970

Mr. J.R. Heller, III
Wilmer, Cutler & Pickering
Farragut Building
900 17th Street, N.W.
Washington, D.C. 20006

Re: Loan No. 618 GH
(Volta Expansion Project)

Dear Rod:

Many thanks for your letter of July 29, 1970 enclosing
the draft of the Valco Second Mortgage.

We have no comments on the draft.

Regards,

Thomas M. Clyde
Attorney

TMC
TMClyde:ep

6186H *Mr. Manning*



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA
Phone 64941

P.O. BOX M77,
ACCRA, GHANA

Our Ref. 231/5326
Your Ref.

Date Rec'd. Aug 18/70
Date Ack'd. Noted by Mr. Wyatt Date August 10, 1970

Mr. Gavin E. Wyatt,
International Bank for Reconstruction
and Development,
1818 High Street, N.W.,
Washington, D.C. 20433,
U.S.A.

Dear Mr. Wyatt,

GH-0-155

LOAN 618H
POWER STUDY FUTURE EXPANSION
DRAFT CONTRACT - KAISER ENGINEERS INTERNATIONAL, INC.

We thank you for your letter of July 16, 1970, on the above subject. The comments offered on the draft contract, proposed by Kaiser Engineers, have been carefully studied, and we submit, hereunder, our own observations on your comments:

Section G-9

Your recommendations are accepted, and we are advising the Consultants, Kaiser Engineers, to incorporate their letter of May 7, 1970 in the agreement.

Section A-3

We are forwarding our acceptance of your suggestions and recommendation to the Consultants, for inclusion in the agreement. In doing so, we have also expressed our anxiety not to extend unduly the scope of the study, thereby resulting in additional increased charges.

Section A-4

We are agreeable to your recommendations on the man-power requirements, necessary for the operation of a Thermal power plant. The Consultants are being advised accordingly, and are also being reminded of the possibilities of taking advantage of the locally based nucleus of trained personnel, for Thermal operation, now in the service of the Electricity Corporation of Ghana, and elsewhere in the country.

Section A-5

We are agreeable to use the method proposed, to evaluate the alternatives. However, we have also invited comments on the proposal from our Consultants, to see whether they hold alternative views on the matter.

Section B-2

Your recommendations are accepted. We are, therefore, requesting the Consultants to amend the draft accordingly, and to review the wording, especially that portion dealing with V.R.A.'s liability limitation.

Section G-2

We have received firm assurance from the Consultants that all documents prepared for us shall be treated as confidential, and shall remain the property of the V.R.A.

Section - E

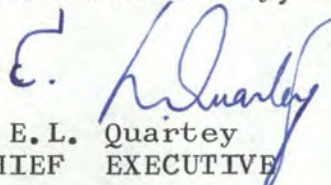
We are advising the Consultants to specify target dates for the commencement and completion of the study, on the lines suggested by you.

We have already received from the Consultants information on the qualification, experience, and capability of the key personnel which they intend to assign to the work. We have asked them to up-date the information, and to forward it direct to you, with a copy to us, in order to save time.

It is our intention to resubmit to you, a revised agreement, incorporating the comments dealt with above, for your further consideration, as soon as we receive such a document from the Consultants.

With kindest regards,

Yours faithfully,


E. L. Quarley
CHIEF EXECUTIVE



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P.O. BOX M77,

ACCRA, GHANA

Our Ref. 231/5326

Phone 64941

Your Ref.

Date. August 10, 1970

Mr. Gavin E. Wyatt,
International Bank for Reconstruction
and Development,
1818 High Street, N.W.,
Washington, D.C. 20433,
U.S.A.

Dear Mr. Wyatt,

LOAN 618H
POWER STUDY FUTURE EXPANSION
DRAFT CONTRACT - KAISER ENGINEERS INTERNATIONAL, INC.

We thank you for your letter of July 16, 1970, on the above subject. The comments offered on the draft contract, proposed by Kaiser Engineers, have been carefully studied, and we submit, hereunder, our own observations on your comments:

Section G-9

Your recommendations are accepted, and we are advising the Consultants, Kaiser Engineers, to incorporate their letter of May 7, 1970 in the agreement.

Section A-3

We are forwarding our acceptance of your suggestions and recommendation to the Consultants, for inclusion in the agreement. In doing so, we have also expressed our anxiety not to extend unduly the scope of the study, thereby resulting in additional increased charges.

Section A-4

We are agreeable to your recommendations on the man-power requirements, necessary for the operation of a Thermal power plant. The Consultants are being advised accordingly, and are also being reminded of the possibilities of taking advantage of the locally based nucleus of trained personnel, for Thermal operation, now in the service of the Electricity Corporation of Ghana, and elsewhere in the country.

Original to: RV-Prof
Date: 8/18/70 Communications
Section

Section A-5

We are agreeable to use the method proposed, to evaluate the alternatives. However, we have also invited comments on the proposal from our Consultants, to see whether they hold alternative views on the matter.

Section B-2

Your recommendations are accepted. We are, therefore, requesting the Consultants to amend the draft accordingly, and to review the wording, especially that portion dealing with V.R.A.'s liability limitation.

Section G-2

We have received firm assurance from the Consultants that all documents prepared for us shall be treated as confidential, and shall remain the property of the V.R.A.

Section - E

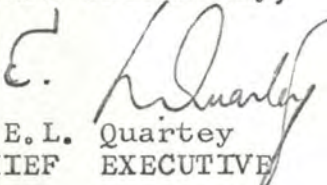
We are advising the Consultants to specify target dates for the commencement and completion of the study, on the lines suggested by you.

We have already received from the Consultants information on the qualification, experience, and capability of the key personnel which they intend to assign to the work. We have asked them to up-date the information, and to forward it direct to you, with a copy to us, in order to save time.

It is our intention to resubmit to you, a revised agreement, incorporating the comments dealt with above, for your further consideration, as soon as we receive such a document from the Consultants.

With kindest regards,

Yours faithfully,


E. L. Quartey
CHIEF EXECUTIVE

1358/5260

618 Colt. ... *Tru. Manning*

VOLTA RIVER AUTHORITY
P. O. BOX M. 77
ACCRA

August 3, 70.

ENG. 742.1

Sadelmi,
S.P.A.,
Corso Matteotti 1,
Milano,
Italy.

Date Rec'd. *Aug. 11/70*
Date Ack'd. *None req.*
Assigned to *Wyatt*

Dear Sirs,

Re Akosombo Expansion
Contract KA-3M
Contract Signing

GHA-0-152

We forward herewith four copies of the Final KA-3M Contract documents Volume I and II duly signed by me on behalf of the Volta River Authority.

We will be pleased if you will, in turn, sign your portion of the documents, inserting the date of signing, and distributing the completed signed copies as follows:-

- One copy of volume I and II to IERD
- Two copies of volume I and II to V.R.A.
- One copy of volume I and II to be retained by yourselves

By copy of this letter we are informing IERD of our action.

In addition to the corrections already made by the Consultants, we have made the following adjustment to the contract to which we want to draw your attention before signing:-

Re Part 4 - Specifications, Part 4a - General Conditions:

Page 4a - 15, Clause GC-31

Customes Duties and Income Tax

Item A: Added to the last sentence: "or the amount payable through Ghana Laws and Regulations whichever is the lower."

The Consultants are being informed, by copy of this letter, about the adjustment of the contract as stated above.

With kindest regards,

Yours truly,

ORI
MR. L. ...

E. L. Quartey
CHIEF EXECUTIVE

Encls:

- cc: IERD, Washington, U.S.A. ✓
- KKII, Oakland, California, U.S.A.
- Director of Finance, VRA, Accra
- Assistant Counsel, VRA, Accra
- Director of Power Operations, VRA, Akosombo

ED:mky

61864

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: JULY 30, 1970

CLASS OF
SERVICE: LT

COUNTRY: GHANA

Re

TEXT:
Cable No.: REYOURCAB JULY TWENTYNINE NO OBJECTION DISBURSEMENT ADVANCE PAYMENT
SADEMI IN FOREIGN CURRENCY REGARDS

WYATT
INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt
Chief, Power Division II
DEPT. Public Utilities Projects

SIGNATURE *[Signature]*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

CLEARANCES AND COPY DISTRIBUTION:

cleared with and cc: Mr. von Busse
(Controller's)
cc: Messrs. Wyatt
Memon
Central Files
Department Files
(GH-0-150)

EAMinnig:dd
IBRD

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: *[Signature]*

61864 Mr. Manning

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

ACKNOWLEDGED 7/30/70

INCOMING CABLE

DATE AND TIME OF CABLE: JULY 29, 1970 1600
LOG NO.: RC 36 / 29
TO: WYATT INTBAFRAD
FROM: ACCRA

ROUTING	
ACTION COPY:	PU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

REURCAB 27 JULY MOBILISATION ADVANCE STATED IN AMENDMENT ONE PARAGRAPH FIVE IN NEW CEDIS IS PAYABLE IN FOREIGN CURRENCY AS EQUIPMENT WILL BE IMPORTED AND PAID FOR IN FOREIGN CURRENCY. REPAYMENT WILL ALSO BE MADE IN FOREIGN CURRENCY. PLEASE INDICATE YOUR APPROVAL REGARDS

QUARTEY VOLTA

IR

61864

July 28, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M77
Accra, Ghana

Dear Mr. Quartey:

Re: Loan 618-GH
Volta Expansion Project

Reference is made to the discussions in Accra last month between Messrs. Kalitsi, MacLeod and Minnig on VRA's financing requirements following receipt of bids for the Volta Expansion Project. Whilst actual bid prices and revised estimates for items to be financed by the Bank Loan 618-GH are now estimated to total N\$7,201,000 an amount of N\$6,218,000 would be available from the Bank's loan. Thus an estimated financing gap of about N\$983,000 exists. This cost increase is due in part to higher civil costs for the Akosombo expansion but also to increased scope especially at ECG substations to meet the higher than expected ECG demand.

You informed us that VRA had approached the Canadian International Development Agency (CIDA) for financing of five transformers required at ECG substations estimated to cost N\$1,100,000. CIDA has informed us that they are favorably considering VRA's request. This letter has the purpose of informing you that the Bank has no objection to the proposed arrangements. If and when the supplementary CIDA financing is confirmed the Description of the Project as defined in Schedule 3 of the Loan Agreement dated June 23, 1969 between the Bank and VRA will require modification to permit disbursement for switchgear etc. at ECG substations at Cape Coast and Achimota. We will inform you of the changes needed once a confirmation from CIDA has been received.

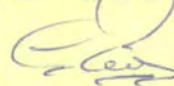
The proceeds of Bank Loans 310-GH (N\$98,000 equivalent) and 618-GH (N\$6,120,000 equivalent) could then be allocated as follows:

July 28, 1970

	<u>In NØ (Foreign Exchange Component)</u>
Turbines	2,145,000
Civil Works & Installation	1,796,000
Smelter & Volta Substations	973,000
ECG Substations: Civil Works, Switchgear & installation	834,000
Consulting Services	200,000
Construction & Service Vehicles	153,000
Contingency	<u>117,000</u>
<u>TOTAL</u>	<u>6,218,000</u>

We would appreciate any comments you may have on the above and information on CIDA's response to your request.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Min
EAMinnig:dd
IBRD/IDA

cc: Messrs. Reitter/Nissenbaum (W. Africa)
Clyde (Legal)
Wyatt
Memon
Central Files
Department Files

61864

July 27, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M77
Accra, Ghana

Dear Mr. Quartey:

Re: Loan 618-GH
Volta Expansion Project
Contract Documents

We have received the following Contract documents from your consultants:

- XA-4 Turbines & Governors (Hitachi)
- XA-6 Intake Gate Hoists (Newton Chambers)
- XA-3M Installation Mechanical Equipment (Sadelmi)

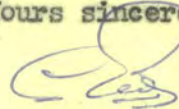
To Contracts XA-4 and XA-6 we have no comments to make. To Contract XA-3M we would like to make the following comments:

- (i) On page 2-1 the total contract value is expressed in New Cedis. This amount consists of a local cost component payable in New Cedis and a foreign cost component expressed in Italian Lira which had been converted to New Cedis utilizing the exchange rate applicable for bid comparison purposes. The breakdown of unit rates in a local and a foreign cost component is consistent with the schedule of quantities and prices on pages 2-4 through 2-10. On page 2-11 however construction equipment is listed with three items to be purchased in the USA, two items in England and one each in Sweden and Italy. The foreign exchange requirements for these items appear to be included in the list on page 2-16 where a total of US\$351,000 is specified. This amount has been reconverted to Italian Lira at the prevailing rate of exchange. Since sub-clause GC-30 on page 4a-14 provides for payment of the local component in Ghanaian currency and for payment of the foreign component in the currency of the bidder's home country, in this case Italian Lira, we do not understand the significance of the breakdown as per page 2-16. The Bank's Procurement Guidelines, February 1968, paragraph 2.4 "Currency Clauses" specifies that "The Bank and IDA require that their borrowers make reasonable efforts to assure that payment for goods and services procured under Bank loans and IDA credits be made in the currency of the country of origin." We would therefore suggest that the appropriate clause be revised to conform with the Guidelines. We would also appreciate it if you could let us know how payments will be effected.

July 27, 1970

- (ii) Section GC-30, page 4a-14, specifies that to facilitate payment of the foreign component, the Authority undertakes to make arrangements with a leading recognized commercial bank in the Supplier's home country to assure that funds will irrevocably be provided. Such funds to be in an amount equal to 30% of the Contractor's total Bid Price. In view of Section 1B-11, page 1-7, Source of Funds, we question the need for this requirement and would appreciate an explanation of the purpose it is intended to serve.
- (iii) We further note that the Contract has no provision for escalation and therefore assume that the unit prices quoted are firm. Would you please confirm this.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

fin EAMinnig/GEWyatt:dd
IBRD/IDA

cc: Messrs. Nissenbaum (Area, W. Africa)
Bennett (Controllers)
Wyatt
Memon
Central Files
Department Files

61864

July 24, 1970

Mr. J. K. Taylor
Manager
Washington Office
Henry J. Kaiser Company
Suite 1000
900 Seventeenth Street, N.W.
Washington, D.C. 20006

Dear Mr. Taylor:

Re: Loan 618-GH Volta River Authority
Volta Expansion Project

Thank you for your letters of July 17 and 22, 1970 with which you sent us the following documents:

Contract XA - 3M Civil Works and Installation of Mechanical Equipment; and additional information concerning Contracts XA-4 - Turbines; and XA-6 - Intake Gate Hoists previously sent to us.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department



EAMinnig:dd
IBRD/IDA

cc: Messrs. Nissenbaum (Area, W. Africa)
Bennett (Controllers)
Wyatt
Central Files
Department Files (GHA-O-142)
(GH-O-145)

618614

OUTGOING WIRE

TO: VOLTA
ACCRA

DATE: JULY 23, 1970

CLASS OF
SERVICE: LT

Wu

COUNTRY: GHANA

TEXT:
Cable No.: ATTENTION QUARTEY REYOURCAB JULY FOURTEEN STOP NO OBJECTION TO MOBILIZATION
PAYMENT SADEIMI CONTRACT IF LOCAL CURRENCY ONLY STOP SINCE THIS PAYMENT
EXPRESSED IN GHANA CURRENCY IN AMENDMENT ONE PARAGRAPH FIVE AND REPAYABLE
TO VRA WE ASSUME LOCAL CURRENCY EXPENDITURE ONLY REGARDS

WYATT

INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt
DEPT. Chief, Power Division II
Public Utilities Projects

SIGNATURE *G. Wyatt*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

cc: Messrs. Nissenbaum (W. Africa)
von Busse (Controllers)
Wyatt
Memon
Central Files
Department Files (GHA-0-138)
EAMinnig:dd
IBRD/IDA *fin*

For Use By Communications Section

Checked for Dispatch: *Fo*

18

ORIGINAL (RIP COPY)

REFERENCE

DISPATCHED

SIGNATURE OF INDIVIDUAL AUTHORIZED TO TRANSMIT

SIGNATURE

THIRD TDY

RECEIVED: 100
DEPARTMENT LETTER (GHV-0-139)
COMPLINT LETTER

DATE

DATE: JUL 23 6 16 PM 1970

NAME

STATE OF CALIFORNIA COMMUNICATIONS

cc: Messrs. LON BIRGE (COMPTROLLER)
M. WILSON
SERVICES AND CONA DISTRIBUTION

AUTHORIZED BY

NOT TO BE TRANSMITTED

RECEIVED

DATE

TO ALL THE FEDERAL GOVT COMMUNICATIONS EXCHANGE AND OTHER AGENCIES

EXHIBITED IN CIVIL SERVICE IN CONNECTION WITH INVESTIGATION AND REPLY

BY THE FEDERAL COMMUNICATIONS COMMISSION AND OTHER AGENCIES

DATE: 10/1/70

REPLY: CIVIL SERVICE 10/1/70 NO OBJECTION TO REPLY

COMM: CIVIL

REPLY: 10/1/70

10/1/70

DATE: 10/1/70

ORIGINAL FILE

<p>RECOMMENDATION AND REASONING</p> <p>FOR THE AWARD</p>	<p>RECOMMENDATION AND REASONING</p> <p>FOR THE AWARD</p>	<p>RECOMMENDATION</p> <p>FOR THE AWARD</p>
--	--	--

618 GH

Mr. Gavin E. Wyatt

July 22, 1970

E. A. Minnig

GHANA - Loan 618-GH Volta River Authority (VRA)
Volta (Akosombo) Expansion Project

1. During the course of the appraisal of the Electricity Corporation of Ghana's (ECG's) 1971-1973 distribution program contact was taken with VRA to discuss VRA's revised financing plan for the Akosombo Expansion Project following receipt of bids for the major items.
2. The table below summarizes the current situation and compares this with the estimate on which the appraisal report May 8, 1969 was based.

	<u>In N/ (Foreign Exchange Cost Element only)</u>		
	<u>Actual Bid Prices or Revised Estimates</u> June 1970	<u>Appraisal Report based on Consultant's estimate</u> May 8, 1969	
1. Turbines and Governors incl. Transport	2,145,000 <u>1/</u>	2,122,000	+ 23,000
2. Civil Works, ancillary mechanical equipment, and installation of turbines	1,796,000 <u>1/</u>	1,490,000	+ 306,000
3. Smelter and Volta Substations	973,000 <u>1/</u>	663,000	+ 310,000
4. Substations serving ECG and minor works	1,934,000 <u>2/</u>	1,428,000	+ 506,000
5. Consulting Services			
(i) Management	50,000 <u>2/</u>	107,000	- 57,000
(ii) Future expansion	150,000 <u>2/</u>	255,000	- 105,000
6. Construction and service vehicles	<u>153,000</u>	<u>153,000</u>	change 983,000
<u>TOTAL</u>	<u>7,201,000</u>	<u>6,218,000</u>	
	<u>(6,218,000)</u>		
FINANCING GAP	<u>983,000</u>		

1/ Actual bid prices increased for possible escalation.
2/ Revised estimates.

3. Original proposed financing totalled N\$6,218,000 to be financed by Loan 618-GH, N\$6,120,000 (US\$6,000,000) and undisbursed portion of Loan 310-GH, N\$98,000.

4. The reasons for the financing gap are:

- (i) N\$306,000 for civil works and installation of mechanical equipment. Only one responsive bid received from Sadelmi the civil sub-contractor for the original Volta Project;
- (ii) N\$310,000 for the Volta and Smelter substations. Higher than estimated civil costs and increased scope; and
- (iii) N\$506,000 for ECG substations primarily because of increased scope. Included in original estimate were expansion of Tema, Takoradi, and Kumasi substations. Because of more rapid load growth of ECG, Achimota and Cape Coast substations need to be expanded by 1972 rather than 1974. ECG's total demand on VRA was originally estimated at 148 MW in 1974. It is estimated that this demand will now be achieved by mid-1972.

5. Thus a total overrun of N\$1,145,000 for the three items listed above plus an overrun of N\$23,000 for the turbines is offset by reduced costs for consulting services of N\$162,000 leaving a financing gap of N\$983,000.

6. To close this financing gap VRA has approached the Canadian International Development Agency (CIDA) to finance five 161/34.5 kV, 25/33 MVA and two 161/11.5/34.5 kV, 33/20/33 MVA transformers required at the ECG substations estimated to cost N\$1,100,000. Mr. Power of CIDA informed me on July 13, 1970 that CIDA was prepared to finance these and that a recommendation would be submitted to the Canadian Government by CIDA for their procurement in Canada.

7. Since CIDA financing is on very favorable terms (50 years, no interest) no serious objections can be raised to this arrangement. If the Canadian Government approves this supplementary loan, financing could be as follows:

In N\$ (Foreign Exchange Component)

	<u>IBRD 618-GH</u>	<u>CIDA</u>
1. Turbines	2,145,000	-
2. Civil Works, ancillary mechanical equipment, and installation of turbines	1,796,000	-
3. Smelter and Volta Substations	973,000	-
4. Substations serving ECG		
(i) Civil Works, installation and switchgear	834,000	-
(ii) Transformers	-	1,100,000
5. Consulting Services	200,000	-
6. Construction and service vehicles	153,000	-
7. Contingency <u>1/</u>	<u>117,000</u>	<u>-</u>
<u>TOTAL</u>	<u>6,218,000</u>	<u>1,100,000</u>

1/ Possible cancellation.

8. However Schedule 3, Description of the Project, sub-paragraph 2 of the Loan Agreement 618-GH dated June 23, 1969 between the Bank and VRA would require modification as follows:

- (2) The expansion of 165 kV substations and related facilities at Akosombo, Volta (Tema) and the Smelter and of other 165 kV substation facilities at Volta (Tema), Sekondi-Takoradi, Kumasi, CAPE COAST AND ACHIMOTA (Accra).

9. Provided CIDA receives the Canadian Government's approval to provide VRA with financing to procure the ECG substation transformers, it is recommended that because of favorable financing terms no objections be raised and that accordingly the Description of the Project be amended as per paragraph 8 above.

10. The incremental financial rate of return for the Akosombo Expansion was estimated at 26%. The increased costs due to factors discussed in paragraph 4 are not expected to change this rate because additional benefits due to increased sales to ECG will offset the additional costs.

July 22, 1970

Conclusion

11. On receipt of confirmation that Canada has agreed to provide the additional financing a letter should be sent to the VRA and the Ghana Government informing them that the Bank has no objection to the proposed change in the financing plan and asking VRA to sign the usual letter containing an appropriate change in the description of the project.

Min EAMinnig:dd
IBRD

cc: Messrs. Reitter/Nissenbaum (Area, W. Africa)
Memon
Central Files
Department Files

6186 #
Mr. Minnig

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

(Suite 1000, 900 Seventeenth Street N.W., Washington, D.C. 20006)

July 20, 1970.

Date Rec'd. July 22/70

Date Ack'd. July 24/70

Assigned to Wypall

Mr. Edward A. Minnig
International Bank for
Reconstruction and Development
Public Utilities Projects Department
1818 H Street N.W.,
Washington D.C. 20433

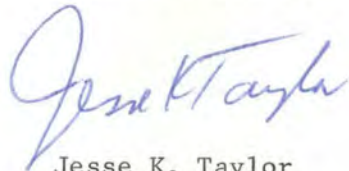
CH-0-145

Doc No 13

Dear Mr. Minnig:

Further to my letter of July 13, 1970 I take pleasure in forwarding to you additional information concerning Conforming Documents - Contracts XA-4 and XA-6.

Sincerely yours,



Jesse K. Taylor
Manager
Washington Office

encl. 2

61864

Your Reference: 231/4400

July 16, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M77
Accra, Ghana

Dear Mr. Quartey:

Re: Loan 618-GH
Power Study Future Expansion
Draft Contract Kaiser Engineers International, Inc.

I thank you for your letter of June 8, 1970 received July 1, 1970 with which you sent us a draft copy of the proposed power study contract and have the following comments to make:

Section G-9 In view of this article we would recommend incorporation of Kaiser's letter dated May 7, 1970 in the agreement.

Section A-3 We recommend the following wording of sub-paragraph (b):
.... of existing and expandable hydro-electric and thermal generating facilities in Nigeria, including Jebba, Shirrore Gorge and Benue Projects. Sub-paragraph (e) should be amended as follows: as an intertie will be reviewed and its value as standby capacity, base load, and peak capacity will be evaluated

Section A-4 It would be advisable for your consultants to review the man-power requirements necessary to operate a thermal power plant and make recommendations on the qualifications and training requirements of plant operators. Estimated costs of training should be included with recommendations on the duration and where such training could be provided.

Section A-5 Evaluation of Alternatives. The discounted cash flow analysis need not take into account depreciation and replacement costs nor sources of financing and financing terms. However the period utilized should be identical for all alternatives, and investments of shorter lived facilities repeated as and when required. The period should preferably be the life of the longest lived alternative.

Section B-2 Reimbursable Costs and Expenses. For VRA's purposes it would be useful if Kaiser prepared a breakdown of the study's estimated costs of US\$140,000 in such a form which would demonstrate the method of billing. This breakdown would furnish details of man-months of corporate officers and staff estimated to be required for completion of the study and allowances in addition to normal salaries and wages utilized, etc. With

July 16, 1970

reference to B-2 (d) and (i) the award of contracts or sub-contracts by your consultants including financial terms should be made in consultation with VRA. The breakdown of the estimated costs should also provide information on costs incurred in connection with B-2 (a). With regard to subparagraph (j) on losses, expenses, or damages not compensated for by insurances, this requirement leaves VRA open to claims. We would suggest that VRA's liability limitation be clearly defined.

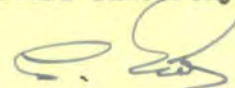
Section G-2 Ownership of Documents. We think it would be very unwise for your consultants to be in a position to publish or otherwise utilize the plans, specifications, reports and documents without the written consent of VRA. Since information for the study will be provided by third parties (Nigeria, Togo and Dahomey) such information should be treated as confidential.

Article E Commencement and Completion. We note that no completion date has been set. We therefore suggest that, based on the estimated man-months to be spent on the study, a target date be specified.


As previously mentioned, the Bank's acceptance of the consulting firm to be employed by VRA and of the terms and conditions of employment also rests on a judgment on the experience and capability of the key personnel to be assigned to the work. We would therefore appreciate it if you could provide us with this additional information.

We hope that the above comments will be useful to you and we look forward to your further communication.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

 EAMinnig/GEWyatt:dd
IBRD/IDA

cc: Messrs. Reitter/Nissenbaum (Area, W. Africa)
Clyde (Legal)
Wyatt
Memon
Raizen
Central Files
Department Files (GH-0-128)

61864

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

(Suite 1000, 900 Seventeenth Street N.W., Washington D.C. 20006)

July 16, 1970.

Mr. Gavin Wyatt
Chief, Power Division II
Public Utilities Projects Department
International Bank for Reconstruction
and Development
1818 H Street N.W.
Washington D.C. 20433

has training.
Date Rec'd. *July 17/70*
Date Ack'd. *July 24/70*
Assigned to *Wyatt*

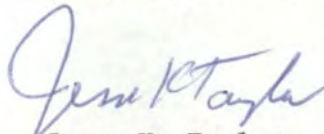
Dear Mr. Wyatt:

The Volta River Authority has asked me to forward a copy
of Contract XA - 3M to you. *- Doc. #12*

GHA-0-142

Enclosed is a conformed copy of this contract together
with Amendment #1.

Sincerely yours,



Jesse K. Taylor
Manager
Washington Office

encl. 1

cc. Mr. Edward A. Minnig

E-313

Mr. Minnig

(Suite 1000, 900 Seventeenth Street N.W., Washington D.C. 20006)

July 16, 1970.

Mr. Gavin Wyatt
Chief, Power Division II
Public Utilities Projects Department
International Bank for Reconstruction
and Development
1818 H Street N.W.
Washington D.C. 20433

Date Rec'd. July 20/70
Date Ack'd. _____
Assigned to W. G. T. L.

same as GH-14

Dear Mr. Wyatt:

The Volta River Authority has asked me to forward a copy of Contract XA - 3M to you.

Enclosed is a conformed copy of this contract together with Amendment #1.

Sincerely yours,
Jesse K. Taylor
Jesse K. Taylor
Manager
Washington Office

encl. 1

cc. Mr. Edward W. Minnig:

Reference is made to our conversation earlier this week on the above subject.

Page 4 of Amendment No. 1 item 5 sets forth the advance payment provision which we discussed.

61864

INCOMING CABLE

DATE AND TIME
OF CABLE:

JULY 14, 1970 1135

LOG NO.:

RC40/14

TO:

WYATT INTBAFRAD

FROM:

ACCRA

let himing
↑

ROUTING

ACTION COPY: PUBLIC UTILITIES POWER II

INFORMATION COPY: PUBLIC UTILITIES PROJECTS

DECODED BY:

TEXT:

REYOURCAB JULY SIX SADEMI CONTRACT. CONSULTANTS COMMENTS AS FOLLOWS
"RE XA - THREE MMM MOBILISATION PAYMENT. OUR ESTIMATE SHOW COSTS OF
BATCHING PLANT AND CONSTRUCTION EQUIPMENT TO BE BETWEEN THREE HUNDRED
FIFTYTHOUSAND AND SEVEN HUNDRED FIFTY THOUSAND DOLLARS US DEPENDING
ON CONDITION NEW OR USED AND AS SIZE OF SEVERAL ITEMS NOT WELL DEFINED
IN EQUIPMENT LIST SADEMI REQUEST FOR NC THREEHUNDRED TWO THOUSAND AND
FIVE HUNDRED APPEARS FAIR". QUERY ANSWERS:

ONE TOTAL CONTRACT VALUE IS NC TWO MILLION THREE HUNDRED NINETYFIVE
THOUSAND THREE HUNDRED EIGHTY.

TWO ADVANCE IS INTEREST FREE AND PAYABLE UPON ENGINEERS CERTIFICATION
MOBILISATION.

THREE ADVANCE NOT REPEAT NOT ADDITIONAL TO BID PRICE.

FOUR ADVANCE REPAYABLE OVER FIFTEEN EQUAL MONTHLY INSTALMENTS THOUGH
NOT EXPRESSLY PROVIDED AS DEDUCTABLE FROM MONTHLY PROGRESS PAYMENTS.

CONSULTANTS INSTRUCTED SEND YOU DRAFT CONTRACT. REGARDS

QUARTEY VOLTA

sb

C-313

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

M. Wyatt
Ghana

INCOMING CABLE
Date Rec'd. *July 14/70*

DATE AND TIME
OF CABLE:

JULY 14, 1970 1135

Date Ack'd.

July 23/70

ROUTING

LOG NO.:

RC40/14

Assigned to

Wyatt

ACTION COPY: PUBLIC UTILITIES POWER II

TO:

WYATT INTBAFRAD

INFORMATION COPY: PUBLIC UTILITIES PROJECTS

FROM:

ACCRA

DECODED BY:

GHA-0-138

See Summary

TEXT:

REYOURCAB JULY SIX SADEMI CONTRACT. CONSULTANT'S COMMENTS AS FOLLOWS

"RE XA - THREE MMM MOBILISATION PAYMENT. OUR ESTIMATE SHOW COSTS OF BATCHING PLANT AND CONSTRUCTION EQUIPMENT TO BE BETWEEN THREE HUNDRED FIFTYTHOUSAND AND SEVEN HUNDRED FIFTY THOUSAND DOLLARS US DEPENDING ON CONDITION NEW OR USED AND AS SIZE OF SEVERAL ITEMS NOT WELL DEFINED IN EQUIPMENT LIST SADEMI REQUEST FOR NC THREEHUNDRED TWO THOUSAND AND FIVE HUNDRED APPEARS FAIR". QUERY ANSWERS:

ONE TOTAL CONTRACT VALUE IS NC TWO MILLION THREE HUNDRED NINETYFIVE THOUSAND THREE HUNDRED EIGHTY.

TWO ADVANCE IS INTEREST FREE AND PAYABLE UPON ENGINEERS CERTIFICATION MOBILISATION.

THREE ADVANCE NOT REPEAT NOT ADDITIONAL TO BID PRICE.

FOUR ADVANCE REPAYABLE OVER FIFTEEN EQUAL MONTHLY INSTALMENTS THOUGH NOT EXPRESSLY PROVIDED AS DEDUCTABLE FROM MONTHLY PROGRESS PAYMENTS.

CONSULTANT'S INSTRUCTED SEND YOU DRAFT CONTRACT. REGARDS

QUARTEY VOLTA

sb

618 GH

Mr. Minnig

HENRY J. KAISER COMPANY

KAISER CENTER • 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

(Suite 1000, 900 Seventeenth Street N.W., Washington D.C., 20006)

July 13, 1970.

Mr. Edward A. Minnig
International Bank for
Reconstruction and Development
Public Utilities Projects Development
1818 - H Street N.W.
Washington D.C. 20433

Dear Mr. Minnig:

Enclosed are two conformed copies of contracts XA4 and XA6
which you requested from the Volta River Authority.

Sincerely yours,

Jess K Taylor

Jess K. Taylor
Manager
Washington Office

*- Doc. No 10
- Doc. No. 11*

encl.

JKT:sas

Date Rec'd. *July 15/70*
Date Ack'd. *N/R*
Assigned to *Wyatt*

GHA-0-140



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

Phone 64941

P.O. BOX M77,
ACCRA, GHANA

Our Ref. 231/4742

Your Ref.

Date 9th July, 1970

J.P. Weston, Esq.,
International Bank for Reconstruction
and Development, 1818 H Street,
N.W., Washington D.C. 20433.
U.S.A.

Dear Mr. Weston,

Thank you very much for your letter. I am sorry about the delay in sending you the rest of your material. Unfortunately, our personnel staff which was preparing the materials on staffing & organisation became preoccupied with other matters. For the meantime, therefore, I am sending you an organisational chart which they prepared in January stating numbers in each organisational unit and Labour Strength Returns for March 1970 classified into functional groups.

As soon as the other materials are secured, I will let you have them.

Yours truly,

E.A.K. Kalitsi
Director of Finance

Original to: P.V. Proj.
Date: 7/13/70
Communications
Section



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

Phone 64941

P.O. BOX M77.
ACCRA, GHANA

Our Ref. 231/4822

Your Ref.

Date 13th July, 1970.

Mr. J. P. Weston,
International Bank for Reconstruction
and Development,
1818 H. Street N.W. Washington,
20433 Washington D.C.

Dear Mr. Weston,

Attached set of tables dated June 1970 contain the recent Load forecasts, construction programme and financial projection which we reported to our Board at their June meeting. You will recognise, of course, that the figures are the same as those we gave to you.

The Maximum Demand projections, (Sheet No.1) which you personally worked on with Mr. Hamenoo, has an asterisked note which states that you allowed for diversity of 7.5% from 1970 onwards. Mr. Quartey has queried this. In the absence on leave of both Mr. Hamenoo and Mr. Macleod, I checked with Mr. Dahl but he is also doubtful about the correctness of the 7.5% diversity. In his view, the figures seem to point to 3% transmission loss and a diversity factor of about 0.9 considering the total load figures. Could you please explain whether we made a typographical error or whether there is a basis for assuming that the diversity factor will be 7.5% for the E.C.G. load.

I will appreciate your comments.

Enc.

Yours sincerely,

E. A. K. Kalitsi

Original to: P.V. Div
Date: 7/18/70
Communications
Section

618 GH

Form No. 27
(6-69)

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY

DATE: JULY 6, 1970

VOLTA

CLASS OF
SERVICE: LT

Wku

COUNTRY: ACCRA

TEXT:
Cable No.:

REYOURCAB JULY FOUR SADEMI CONTRACT STOP INFORMATION PROVIDED INSUFFICIENT
FOR JUDGEMENT JUSTIFICATION STOP CONSULTANTS EVALUATION REQUIRED STOP
QUERIES WHAT IS TOTAL CONTRACT VALUE TWO WHAT ARE TERMS OF PAYMENT THREE
IS AMOUNT ~~NO~~ 302500 QUOTED IN ADDITION TO BID PRICE FOUR ALTERNATIVELY
IS ADVANCE REQUESTED DEDUCTIBLE FROM MONTHLY PROGRESS PAYMENTS AS PER
CONTRACT OVER FIFTEEN MONTH PERIOD STOP APPRECIATE COPY DRAFT CONTRACT
REGARDS

WYATT

INTBAFRAD

NOT TO BE TRANSMITTED

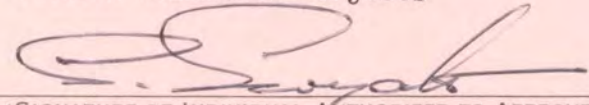
AUTHORIZED BY:

Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects

NAME

DEPT.

SIGNATURE



(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:

cc: Memon
Nissenbaum (Area, West Africa)
Bennett (Controllers)

EAMinnig:rmd

IBRD Control No. GH-0-129



For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch:

fo

618 GH *M. Hanning*

INCOMING CABLE

DATE AND TIME
OF CABLE:

JULY 4, 1970

1140 Date Rec'd. *July 6/70*

ROUTING

LOG NO.:

RC 25/4

Date Ack'd. *July 6 Cable* ACTION COPY:

FU - POWER II

TO:

INTBAFRAD

Assigned to *Wyatt* INFORMATION COPY:

PUBLIC UTILITIES PROJECTS

FROM:

ACCRA

DECODED BY:

TEXT:

QH-0-129

FOR WYATT

RE CONTRACT MA-3M SOLE BIDDER SADEIMI REQUESTING MOBILISATION ADVANCE AMOUNTING UP TO NC302,500 IN FOREIGN CURRENCY FOR CONSTRUCTION EQUIPMENT DELIVERED ON SITE. ADVANCE PAYABLE OVER 15 MONTHLY INSTALMENTS. CONSULTANTS CONSIDER AMOUNT REQUESTED FAIR AND RECOMMEND OUR ACCEPTANCE. PLEASE CONFIRM YOU HAVE NO OBJECTION OUR ACCEPTANCE AS ADVANCE WILL BE FINANCED BY 618GH

QUARTEY VOLTA

MT

Ghana
M. Minig

640-0-129

I N C O M I N G C A B L E

DATE AND TIME OF CABLE: JULY 4, 1970 1140

LOG NO.: RC 25/4

TO: INTBAFRAD

FROM: ACCRA

R O U T I N G	
ACTION COPY:	PU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

FOR WYATT

RE CONTRACT MA-3M SOLE BIDDER SADEIMI REQUESTING MOBILISATION ADVANCE AMOUNTING UP TO NC302,500 IN FOREIGN CURRENCY FOR CONSTRUCTION EQUIPMENT DELIVERED ON SITE. ADVANCE PAYABLE OVER 15 MONTHLY INSTALMENTS. CONSULTANTS CONSIDER AMOUNT REQUESTED FAIR AND RECOMMEND OUR ACCEPTANCE. PLEASE CONFIRM YOU HAVE NO OBJECTION OUR ACCEPTANCE AS ADVANCE WILL BE FINANCED BY 618GH

QUARTEY VOLTA

MT

June 30, 1970

Mr. P. Krukowsky
Commonwealth Africa Section
Canadian International Development Agency
Fuller Building
75 Albert Street
Ottawa 4
Canada

Re: Volta River Authority, Ghana
Akosombo Expansion Project

Dear Paul:

With reference to your telephone conversation last week with Mr. Minnig, enclosed is a copy of VRA's substation expansion program and the relevant cost estimate. As discussed, VRA is faced with a shortage of funds to complete the Volta Expansion Project amounting to N¢ 1,145,000. This figure results from higher than estimated cost at the power house for civil works and installation of mechanical equipment (N¢ 306,000), increased costs at the smelter and Volta substations (N¢ 310,000), increased requirements at ECG substations because of more rapid than anticipated ECG load growth, especially at Accra-Achimota (N¢ 506,000), and an increase in turbine costs (N¢ 23,000).

We understand that VRA has approached you with the request to finance 5, 25/33 MVA, 161/34.5 kv; and 2, 33/20/33 MVA, 161/11.5/34.5 kv transformers estimated to cost N¢ 1,100,000.

In the event that CIDA would be in a position to favorably consider VRA's request, the allocation of the proceeds of the IBRD Loan 618-GH could be rescheduled. This would reduce the financial gap to about N¢ 45,000 which would have to be financed BY VRA out of its own resources.

Summarized below are the actual and estimated foreign exchange costs of the project compared with the April 1969 estimate which formed the basis for the IBRD Loan 618-GH:

	In M/\$	
	Actual & Estimated June 1970	April 1969 Estimates
Turbines	2,145,000	2,122,000
Civil Works, Installation Trash racks, etc.	1,796,000	1,490,000
Smelter & Volta substations	973,000	663,000
ECG Substations	<u>1,934,000</u>	<u>1,490,000</u>
Total	<u>6,848,000</u> <u>5,703,000</u>	<u>5,703,000</u>
Financing Gap	<u>1,145,000</u>	

If CIDA financing of transformers at ECG substations were available, the following financial plan could result:

	In M/\$		
	CIDA	IBRD	VRA
Turbines	-	2,145,000	-
Civil Works, Installation of mechanical equipment, trash racks, etc.	-	1,751,000	45,000
Smelter and Volta substations	-	973,000	-
ECG Substations			
Transformers	1,100,000		-
Switchgear, etc.	-	<u>834,000</u>	-
Total	<u>1,100,000</u>	<u>5,703,000</u>	<u>45,000</u>

The following table summarizes the Maximum Demand of ECG for purchases from VRA:

	Maximum Demand in MW					
	1969	1970	1971	1972	1973	1974
Estimate 1967	87	98	108	119	133	148
Estimate 1970	-	97 Actual	141	158	181	197

The increase over the 1967 estimate is mainly due to two factors: 1) distribution rehabilitation work carried out in the period 1968-70 thus meeting a suppressed demand; and ii) connection of industrial loads such as textile factories and water works.

Mr. P. Krukowsky

- 3 -

June 30, 1970

We hope that the above information and the project report already mailed will be of service to you. Please let us know if you have any additional questions.

Yours sincerely,

H. J. Nissenbaum
Western Africa Department

HJ TMinnig/
HJNissenbaum/bb

cc: Mr. A. Roy MacMillan
Mr. P. Reitter
Mr. Menon

VRA SUBSTATION EXPANSION PROGRAMME TO BE
COMPLETED ULTIMO 1972

WORK SCHEDULE

- Schedule I: Purchase of Transformers
- Schedule II: Purchase of Switchgear Protection and Control Equipment.
- Schedule III: Installation of equipment to be purchased according to Schedule I & II together with related Contractor furnished equipment and materials.

The preliminary work, before specification of the equipment for the substation expansion is to begin, is expected to be completed within 15th June 1970.

Schedule I - Purchase of Transformers
Tendering on the World Market.

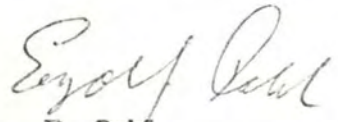
Preparation of Tendering documents for Transformer equipment	15.6 - 20.7, 1970
Tendering documents for Transformer equipment sent for approval to the World Bank	20.7 - 1.9, 1970
Preparation for Tendering	1.9 - 15.9, 1970
Tendering on the World Market for Transformer equipment.	15.9 - 15.11, 1970
Preparation work for Award of Contract for Transformer delivery.	15.11. - 15.12, 1970
Award - proposal approved by the World Bank	15.1, 1971
Award of Contract and Finalising contract documents per	15.2, 1971
Delivery of transformer equipment medio	1972
Installation of Transformer equipment completed ultimo	1972

Schedule II - Purchase of Switchgear
Equipment Protection and Control
Equipment

Schedule III - Installation of equipment
purchased according to Schedule I & II
together with related contractor
furnished equipment and materials.

Tendering on the World market or "locally" with Suppliers and contractors already engaged with the Akosombo Expansion.

Preparation of tendering documents	20.7	-	1.9, 1970
Tendering documents for approval of the World Bank	1.9	-	1.10, 1970
Preparation for Tendering	1.10	-	15.10, 1970
Tendering	15.10	-	15.12, 1970
Preparatory work for Award of contract for switchgear - protection and control equipment and installation	20.1	-	15.2, 1971
Award proposal approved by the World Bank.	per		15.3, 1971
Award of Contract and finalising contract documents per			15.4, 1971
Delivery of switchgear protection and control equipment	primo		1972
Installation period	1.1	-	31.12, 1972


E. Dahl
SNR. ELECT. ENGINEER

April 8, 1970

MEMORANDUM
1972 SUBSTATION EXPANSION

ESTIMATE OF COSTS:

A. Main Electrical Equipment:

	N/
I. 161 KV Equipment	
3 C.B. 10,000 MVA at N/60,000 -	180,000
5 x 3 lightning arresters at N/1,000	- 15,000
3 Disconnecter switches at N/3,810	- 11,430
4 Disconnecter switches electrically operated at N/4,950	- <u>19,800</u>
	N/226,230
Say	N/230,000
II. 34.5 KV Equipment	
6 x 3 Current Transformers at N/207	3,730
6 x 3 Voltage Transformers at N/404	7,260
6 Disconnecter switches manually operated	9,180
6 Grounding Transformers at N/2,300	<u>13,800</u>
	N/ 33,970
Say	34,000
III. Switchboard - Measuring Control Equipment	
6 Panels at N/11,500	<u>69,000</u>
Say	N/70,000
IV. Transformers:	
5 x 25/33 MVA, 161/345 KV at N/140,000	700,000

Total Cost of Main Electrical Equipment:

I.	161 kV equipment	-	N/ 230,000
II.	34.5 kV equipment	-	34,000
III.	Switchboard-Measuring Control Equipment	-	70,000
IV.	Transformers	-	<u>1,100,000</u>
	A. Total		<u>N/1,434,000</u>

B. Installation Works Costs:

- (1) Earth work, concrete work, steel structures, Fencing and Gates, Busbars, Miscellaneous Electrical Devices and General Materials.
- (2) Installation costs of Main Electrical Equipment according to A.

TAKORADI:

1	161 kV breaker field	-	N/ 70,000
1	34.5 kV - " -		
	Less C.B.	-	N/ 2,500
1	11.5 kV. - " -		
	Less C.B.	-	N/ 2,000
2	transformers, transp. and installation	-	N/ 48,000
	Concrete work	-	N/ <u>20,000</u>
			<u>N/ 142,500</u>

CAPE COAST:

1 transformer:			
transp. and installation	-		24,000
Dismanteling, at Takoradi and Miscellaneous	-		10,000
1 11.5 kV breaker field			
Less breaker	-		<u>2,000</u>
			<u>N/ 36,000</u>

KUMASI:

1	161 kV breaker field	-	N/ 70,000
1	34.5 kV - " -		
	Less breaker	-	N/ 2,500
1 transformer:			
transp. and installation	-		N/ 24,000
Concrete	-		N/ 20,000

TEMA:

2 Disconnectors	-	N/	20,000
2 Transformers:			
transport & installation	-	N/	48,000
concrete work	-	N/	40,000
2 34.5 kV breaker field less breaker	-	N/	5,000
2 11.5 kV breaker field less breaker	-	N/	<u>4,000</u>
		N/	<u>117,000</u>

ACHIMOTA:

1 161 kV circuit breaker field	-	N/	70,000
1 34.5 - " - less breaker		N/	2,500
3 34.5 kV circuit breaker fields Breaker removal	-	N/	3,000
1 transformer transport and Installation	-	N/	24,000
Concrete work	-	N/	<u>20,000</u>
			<u>119,500</u>

B. Total costs for Installation work:

Takoradi	-	N/	142,500
Cape Coast	-	N/	36,000
Kumasi	-	N/	120,500
Tema	-	N/	117,000
Achimota	-	N/	<u>119,500</u>

B. Total 535,500

Say N/ 600,000

Total costs for 1972 - Substation Expansion:

A. Main Electrical Equipment	-	N/	1,434,000
B. Installation Works	-	N/	<u>600,000</u>
			<u>N/2,034,000</u>

Total A and B

Costs A and B in Local and Foreign Components:

		N/		
		Foreign	Local	Total
1.	Transformers: Achimota, Tema, Takoradi, Kumasi, spare	1,100	-	1,100
2.	161 kV equipment 3 c. br. 10,000 MVA 5 x 3 lightning arreasters 7 Disconnector switches	230	-	230
3.	34.4 kV equipment	34	-	34
4.	Pannels	70	-	70
		1,434	-	1,434
5.	Installations Works	500	100	600
		1,934	100	2,034

Installation Works - Unit Prices Re Item B

The prices include all costs of installation, Earthwork, Concrete work, miscellaneous electrical equipment (for inst. cables and busbar structure.) The prices does not include the Main Electrical equipment to be installed.

(1)	161 kV Circuit Breaker field	N/ <u>70,000</u>
(2)	161 kV disconnector field	N/ <u>10,000</u>
(3)	13.8 kV circuit breaker field less the circuit breaker	N/ <u>2,000</u>
(4)	34.5 kV circuit breaker field less the circuit breaker	N/ <u>2,500</u>
(5)	1 Transformer (for inst. 85 MVA) transport and Installation	N/ 24,000
	Concrete work	N/ <u>20,000</u>
		N/ <u>44,000</u>

The above unit prices are found by manipulation of installation prices given in the Sadelmi XS-2 Contract per 1970. Schedule of quantities and prices. The costs concerning the Transmission Line Volta - Snelter are drawn out of the table and the remaining cost figures are used to evaluate the unit prices. Smaller Control house expansions are expected to be covered by the above unit prices.

All unit prices for Electrical Equipment and Installation costs are recorded in a card file.

618 GH

OFFICE MEMORANDUM

TO: Central Files

FROM: Thomas M. Clyde *TMC.*

SUBJECT: Loan No. 618 GH (Volta Expansion Project)

DATE: June 23, 1970

I am attaching a bound volume entitled "The Volta River Project: The Volta River Authority and Volta Aluminium Company Limited, 1969". This volume includes copies of all the papers relating to the financing of the first expansion of the facilities of the Volta River Authority and the facilities of the Volta Aluminium Company Limited. I would appreciate your including this bound volume as one of the documents relating to the above Bank Loan. There is an additional copy of the volume in the library of the Legal Department.

Attachment

cc: Mr. Nissenbaum
Mr. Raizen

TM Clyde:ep

Central Files

June 23, 1970

Thomas M. Clyde

Loan No. 618 GH (Volta Expansion Project)

I am attaching a bound volume entitled "The Volta River Project: The Volta River Authority and Volta Aluminium Company Limited, 1969". This volume includes copies of all the papers relating to the financing of the first expansion of the facilities of the Volta River Authority and the facilities of the Volta Aluminium Company Limited. I would appreciate your including this bound volume as one of the documents relating to the above Bank Loan. There is an additional copy of the volume in the library of the Legal Department.

Attachment

cc: Mr. Nissenbaum
Mr. Raizen

TMC TM Clyde:ep

6186H

June 19, 1970

Your ref. 400/006/4152

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M77
Accra
GHANA

Dear Mr. Quartey:

Very many thanks for your letter of June 10 and the book entitled "The Volta Resettlement Experience". We will read it with interest and I am sure it will be of value to others concerned with the difficult problems of resettlement.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

GEWyatt:jc
IBRD

cc: Central Files
Department Files (Control No. GH-O-123)

6186A



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Phone 64941

Our Ref. 400/006/4152

Date Rec'd. June 18/70

Date. 10th June, 1970.

Your Ref.

Date Ack'd. June 19/70

W. J. Galt

Chief, Power Division II,
Public Utilities Project Department,
International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington, D.C. 20433,
U.S.A.

GH-0-123

Dear Sir,

VOITA RESETTLEMENT EXPERIENCE

I have pleasure to present you with a copy of the book
"Volta Resettlement Experience", edited by Dr. Robert Chambers.

The book records the experience of some of those most
deeply concerned with the massive resettlement programme. It
also discusses some of the major issues raised, the problems
that have had to be faced, and the considerable achievements
of the programme.

Your acknowledgement in due course will be appreciated.

Yours faithfully,

E. L. Quartey
E. L. Quartey,
CHIEF EXECUTIVE.

Encl:

Mr. N. J. Nissenbaum

June 10, 1970

Ali N. Memon

GHANA - Implementation of Bank Projects
Your Memo dated June 4, 1970

Credit 118-GH

The reason for slippages in disbursements has been slow progress of the construction. This is a result of several factors:

- (a) delay in design, tendering, and award of substation civil contracts;
- (b) inability of ECG's workforce to erect 1.1 kV and 11 kV overhead distribution lines on schedule because exceptional weather conditions required the workforce to carry out maintenance;
- (c) late arrival of materials;
- (d) difficulties encountered in location of substations and right-of-way negotiations resulting in some re-routing and redesign; and
- (e) delay in consultant's report on minor centers.

The difficulties appear to have been overcome and progress at the time of last supervision mission was satisfactory. Delay of several months in completion of some individual parts of the project are anticipated. However, the disbursements are expected to be completed by the closing date, March 31, 1971.

Loan 618-GH

The reason for slippages in disbursements has been the fact that schedule for award of contracts proved too optimistic. However, several contracts have now been placed and the disbursements are expected to pick up in the latter part of this year. No delay in completion of the project is anticipated.

ANM
ANMemon:jaca
IBRD

cc: Mr. Wyatt
Central Files
Department Files

61864 m. Manning



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Phone 64941

Our Ref. 231/4400
Your Ref.

Date. 8th June, 1970.

Mr. Gavin E. Wyatt,
International Bank for Reconstruction
and Development,
1818 H Street, NW.,
Washington D.C. 20433
U. S. A.

Date rec'd. July 1/70
Date Ack'd. July 16, 1970
Assigned to Wyatt

Dear Mr. Wyatt,

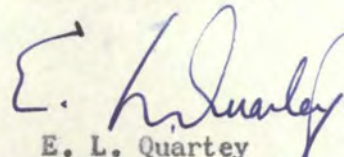
GH-0-128

LOAN GH 618
STUDY OF VOLTA RIVER AUTHORITY'S FUTURE POWER NEEDS

We forward for your approval a draft of an agreement for appointing Kaiser Engineers International of Oakland California as Consultants for Study of Volta River Authority's Future Power needs. With the exception of paragraph two of Section D-1 dealing with taxes on expatriate personnel upon which we have reserved our position, we are prepared to accept the text as it is, read together with Kaiser's letter of 7th May, 1970.

We will appreciate your views please.

Yours sincerely,


E. L. Quartey
CHIEF EXECUTIVE

Encl:

When Kaiser going to put in charge and operation of the

C O P Y

KAISER ENGINEERS INTERNATIONS, INC.

KAISER CENTER. 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604.
CABLE ADDRESS: KAISENGS

Mr. E. L. Quartey,
Chief Executive,
Volta River Authority,
P. O. Box M-77,
Accra, Ghana.

May 7, 1970.

Dear Mr. Quartey,

Reference is made to the draft contract which I handed you on April 22, 1970 covering Kaiser Engineers services for a proposed study of the Authority's future power generation requirements.

Confirming my oral advice of that date, we estimate the total cost including fee of Kaiser Engineers services under the draft contract be \$140,000. This does not include the cost of local travel and subsistence expenses within or between Ghana, Togo, Dahomey, and Nigeria, which is assumed to be provided by the Volta River Authority and is estimated to be approximately \$6,000. Neither does it include cost of services, if any, assisting the VRA in negotiations with representatives of Nigeria, Dahomey, or Togo. Such services, if required by the VRA, could cost on the order of twelve to fifteen thousand dollars plus travel expenses on the basis, for example, of an assumed three man-months of assistance.

As I mentioned, we will make periodic review and reports of recorded, committed, and forecast costs. Should the forecast total of Kaiser Engineers services under the contract at any time exceed \$140,000, we will so advise the VRA, discuss the reasons for the overrun with the VRA, and obtain VRA approval before proceeding further with the work.

In further explanation of the scope of services you desire, which I understand is accurately described in our draft contract, we agree to include in our study the following specific items:

A. IMPORT OF NIGERIAN POWER

- (1) Quantity of power to be imported whether
 - (a) peaking power
 - (b) transfer
 - (c) firm quantity of power obtainableor from Nigeria.
- (2) Contract period of the agreement.
- (3) Reliability of the Nigerian power supply.

B. HYDRO POWER

Prospective sites, based on information contained in the references cited in item "D" below, and other existing data.

- (a) Kpong
- (b) Bui and Others
 - (i) Western Rivers
 - (ii) White Volta etc.
- (c) Additional units requirements at Akosombo to support Kpong Hydro.
- (d) Additional units at Akosombo without Kpong.

C. THERMAL

- (i) Steam plant for system base load.
- (ii) Gas turbine for peaking purposes or base load.

D. REFERENCES

Bui report (Russia)
Western Rivers (Checkoslovakai etc.)
Power Planning Committee Summary (1962)
Ingledow & Associates
Nathan Harza Group
KEII's own report and files on Kpong
KEII's own evaluation of Bui
KEII's review of capacity of Akosombo,
following on the Russian report.

I hope that this letter will serve to clarify the points you raised in our April 22, 1970 meeting. We would be most happy to continue serving the VRA by providing these services.

Very truly yours,

KAISER ENGINEERS INTERNATIONAL INC.

(SGD.) RICHARD A. LOWELL

AGREEMENT

THIS AGREEMENT made and entered into as of the _____ day of _____, one thousand nine hundred and seventy, by and between the Volta River Authority (hereinafter called "The Authority") and Kaiser Engineers International, Inc., a corporation organized and existing under the laws of Nevada in the United States of America (hereinafter referred to as "Kaiser Engineers")

WITNESSETH:

WHEREAS, the Authority owns and operates a generating station at Akosombo, Ghana, and a high-voltage transmission system and substations in Ghana (hereinafter sometimes called the "Existing System") and now desires to determine the most economic way to meet future load growth after 1977; and

WHEREAS, the Authority desires to appoint Kaiser Engineers as its engineer to provide consulting services for the economic evaluation of alternative means to meet power requirements after completion of the Akosombo Power Plant to its full capacity,

NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, The Authority and Kaiser Engineers hereby agree as follows:

ARTICLE A - SCOPE OF SERVICES

The Authority has determined that the completed power plant at Akosombo will meet power market requirements until 1977. To meet the increase in demand beyond that date, the Authority will require additional power-generating capability. Kaiser Engineers will undertake studies to provide a projection of the amount of additional power-generating capability required, as well as the time stages when such power will be required for use. Additionally, the following three alternatives will be evaluated as potential sources of the required additional power-generating capability:

- The most promising hydroelectric development
- Interconnection with power sources in Nigeria
- A thermal power plant.

Section A -1 - Electrical Power Generating Requirements

To evaluate the power generating requirements, Kaiser Engineers will:

- a. Review the Authority's load forecast for the period 1970 to 1982. ✓
- b. Re-evaluate the generating capability and annual energy generation of the Akosombo Project, based on the analysis of updated hydrologic data and operation records furnished by the Authority. ✓
- c. Prepare schedules of power requirements which will define the power demand in terms of time, location, and load characteristics. ✓

Section A - 2 - Potential Sources of Electrical Power from Hydroelectric Generation (First Alternative Source)

Kaiser Engineers will review existing reports and data on potential hydroelectric projects to assess whether one or more of these projects could be selected as the next step in the development of Ghana's hydroelectric potential. For each of these existing reports Kaiser Engineers will:

- a. Review component data and update with such information as may have become available since preparation of the original report, to confirm power development potential. ✓
- b. Examine layout with reference to the selection of sites and arrangement of the dam and appurtenant structures. ✓
- c. Review the type of dam to be selected on the basis of site characteristics, height requirements, and economic availability of construction materials. ✓
- d. Review size, number, type, and installation phasing of generating units and intertie with existing power generating systems. ✓

- e. Review required transmission and substation facilities in relation to existing systems, with particular attention to transmission losses and system stability. ✓
- f. Review and update ancillary benefits as related to regional and national growth. ✓
- h. Update cost estimates. ✓

Section A-3 - Potential Electric Power from Interconnection with Newer Sources in Nigeria via Togo and Dahomey (Second Alternative Source)

In connection with the possible supply of power to Ghana from Nigeria, and based on existing information available to them in Ghana and Nigeria, Kaiser Engineers will review and evaluate the following:

- a. Power load forecast for Nigeria for the period 1970 to 1982 or for such extended period as may be required for study purposes. ✓
- b. Present and future generating capability and annual energy generation of existing and expandable hydroelectric ^{and thermal} generating facilities in Nigeria. *including Jebiba, Sherrara Gorge and Benue projects* ✓
- c. Nigeria's program of expansion of such facilities and provisions for financing such expansion. ✓
- d. The year-by-year surplus capacity of Nigerian power which ~~is~~ would be available to be placed at the disposal of the Authority ✓
- e. The technical and financial feasibility of such works as may be required to transmit power from the Nigerian power grid to the Authority's system. Within this study, that element of the transmission system now under construction between Ghana, Togo, and Dahomey will be analysed in regard to present designated service and also in regard to the future utilization in the Ghana-Nigeria transmission system linkage. ✓

The capacity of the present 161-KV line as an intertie will be reviewed and its value as standby capacity, ^{base load} and peak capacity will be evaluated. Particular attention will be given to transmission voltages, system stability at various voltages, and demands, and reliability. The capability and reliability of the Nigerian system for this duty will also be considered. ✓

- f. The terms and conditions under which such transfer of power should be made, including the transfer of power across Togo and Dahomey. ✓
- g. The limiting period of such agreement, whereafter additional Ghanaian power requirements would have to be met by the development of further power generating capability in Ghana. ✓

Section A-4. - Potential Sources of Electrical Power from a Thermal Power Plant (Third Alternative Source)

An economic evaluation of a thermal power plant will be carried out by Kaiser Engineers as follows:

- a. Consideration will be given to alternative types and sizes of thermal power plants with respect to the initial and ultimate capacity, the most economical size of generating unit, and the relative efficiencies. ✓
- b. An evaluation will be made of the most economical location of thermal power plant with regard to fuel transport cost, base load development, load transmission cost, availability of cooling water, environmental and sociological considerations. ✓
- c. The availability and price of alternative fuels will be studied with particular regard to transportation costs and the possible utilization of resources within West Africa. ✓

? Training of operators.

- d. Capital costs, annual operating costs, annual capital charges, and cost of delivered power will be considered for the alternative type and sizes of thermal power plant.

Section A-5 - Evaluation of Alternatives

Upon completion of studies outlined in Section A-1 through A-4 above, Kaiser Engineers will prepare an economic evaluation of the alternative means of meeting the Authority's power demand after the year 1977.

- a. In preparing the economic evaluation, the discounted cash flow analysis will be used and the equalizing discount rate of the various alternatives will be determined. Economic analysis will be based essentially on the following factors:
- i. Capital cost of the work, including additional transmission system capability, ✓
 - ii. Investment drawdown, ✓
 - X iii. Depreciation and obsolescence costs, ✓
 - iv. Maintenance and replacement costs, ✓
 - v. Operating and administration costs, ✓
 - vi. Total generating costs, ✓
 - vii. Transmission costs, and ✓
 - X viii. Sources of financing and financing terms.
- b. An overall evaluation of the various alternatives will require the consideration of technical matters and other important factors as follows:
- i. The nature of the power required and available, whether base load, peak load, firm power, or dump energy; the overall reliability of power supplied, and the stability of developed systems.

- ii. The possible reduction of system reserve capacity requirements in the event of a Ghana-Nigeria intertie. ✓
- iii. Socioeconomic effects of the various alternatives. ✓
- iv. Geopolitical aspects insofar as international agreement must be attained and maintained. ✓

Section A-6 - Negotiation Assistance

Kaiser Engineers will prepare lists of supplementary information and data which would be required by the authority from Nigeria and Togo and Dahomey to provide a basis of technical and financial discussions and negotiations between representatives of the countries involved. Kaiser Engineers will furnish economic advice and assistance to the authority should such negotiations take place as well as provide technical assistance to the Authority in negotiations with respect to:

- a. Available capacity, if any, that could be placed at the Authority's disposal year by year if the transmission lines currently under construction between Ghana, Togo, and Dahomey were extended to connect with the Nigerian Transmission System. ✓
- b. The terms and conditions under which Nigerian generating capacity should be made available to the authority. ✓

Kaiser Engineers will also provide technical assistance to the Authority during negotiations with Togo and Dahomey regarding terms and conditions for the use of transmission facilities within these two countries. ✓

ARTICLE B - REIMBURSABLE COSTS AND EXPENSES AND FEE

Section B-1 - Fee

For the performance of the services pursuant to Article A hereof, the Authority shall reimburse Kaiser Engineers for all costs and expenses incurred by Kaiser Engineers in connection with such services (which may sometimes hereinafter be referred to as the "work") in accordance with Section B-2 plus a fee in U.S. dollars equal to twenty-five percent (25%) of the total of the actual costs and expenses reimbursable under paragraphs a and b of Section B-2 to cover Kaiser Engineers' general corporate expenses and profit. Such costs and expenses and fee shall be paid as provided in Article C hereof.

Section B-2 - Reimbursable Costs and Expenses

The Authority shall reimburse Kaiser Engineers for all of its costs and expenses, including without limitation, the following:

- a. All salaries and wages of personnel (including personnel on the payrolls of Kaiser Engineers' parent or affiliated companies on loan for the performance of the work, and including corporate officers on the basis of a standard U.S. \$140 per day rate) for corporate officers for time expended in the performance of the Work, together with an allowance in accordance with Kaiser Engineers' standard billing practices to cover payroll taxes, workmen's compensation and employer's liability insurance, group life, hospital and medical insurance, and all sick leave, vacation and holiday benefits for such personnel.
- b. An amount equal to seventy-five percent (75%) of the total amount reimbursable under paragraph a. of this Section B-2 to cover overhead costs at locations to which such personnel are regularly assigned, which overhead costs shall include rent, light, heat, water, furniture and equipment, office supplies and local telephone services, general accounting expense, retirement plans and general insurance.

- c. Transportation, subsistence and other travel expenses of all personnel, including corporate officers and consultants; long distance telephone and telegraph services; incidental purchased labor or services; cost of computer and reproduction services and the usage of electronic composing and related equipment at Kaiser Engineers' standard rates.
- d. All amounts paid or incurred by Kaiser Engineers under or in connection with purchase orders, contracts or subcontracts let or issued for the project. *Construction with VISA.*
- e. The cost of insurance placed in connection with the performance of the services.
- f. The cost, including operating, repair and maintenance cost, of purchasing or renting all tools, equipment, motor vehicles, materials, supplies and facilities necessary for the performance of the services. The authority shall have title to and own all purchased tools, equipment, materials, supplies and facilities the cost of which are reimbursable costs under the provisions of this paragraph f.
- g. All amounts paid for transportation of goods including loading, unloading, express demurrage, port charges, packing, crating, custom broker fees and related charges.
- h. Costs incurred, paid or repaid, pursuant to standard employment agreements to or for the benefit of personnel not usually resident in the country or countries of assignment during the performance of the services including without limitation:
 - i. Housing allowances for personnel and their dependents.
 - ii. Schooling allowances for dependents or personnel below university level.
 - iii. Costs of travel, transportation and moving expenses (including expense accounts, medical examinations, inoculations, visas, passports and storage of excess furniture) and relocation subsistence of

personnel and their dependents and household goods to and from the point of employment or transfer.

- i. Fees paid to outside consultants. *Consultation with JRS.*
- j. All losses, expenses or damages of any kind not compensated to Kaiser Engineers by the Authority's or Kaiser Engineers' insurance or otherwise, actually sustained by Kaiser Engineers in connection with the Work except to the extent caused solely by the negligence of Kaiser Engineers' corporate officers having overall direction of and responsibility for Kaiser Engineers' services hereunder; provided, however, that in no event shall the aggregate of Kaiser Engineers' liability exceed the fee paid to Kaiser Engineers hereunder. As used herein "corporate officers" shall mean the Chairman of the Board of Directors, the President, Vice Presidents, the Secretary and the Treasurer.
- k. All other costs and expenses of every kind reasonably incurred in any place in connection with the performance of the Work. Such other costs and expenses shall include, but not be limited to, the following:
- i. Taxes and fees, as provided in Article D.
 - ii. Amounts paid for legal expenses except those related to dispute or negotiation between Kaiser Engineers and the Authority.
 - iii. Any currency conversion losses.

ARTICLE C - PAYMENT OF COSTS, EXPENSES AND FEE

Section C-1 - Accounts

Promptly upon executive of this Agreement, Kaiser Engineers shall open an account in the Main Office of the Bank of America in Oakland, California. Said account shall be established in the name of Kaiser Engineers in such manner that withdrawals from said account may be made by checks drawn by

Kaiser Engineers. All moneys withdrawn from said account by Kaiser Engineers shall be used in payment or reimbursement of costs and expenses and fee as provided in Article B.

Section C-2 - Deposit of Funds and Payment

Funds shall be deposited by the Authority in said account from time to time and in such amounts as are hereinafter provided. All deposits in said account shall be in U.S. dollars. Within thirty (30) days after execution of this Agreement the Authority shall deposit in the account opened in the Bank of America the U.S. dollar costs and expenses which are estimated will be incurred by Kaiser Engineers during the first three (3) months of the project and the amount of the fee applicable thereto.

Beginning on the last business day of the month following the month in which a deposit is made pursuant to the preceding paragraph, and on or before the last business day of each month thereafter during the performance of the Work, Kaiser Engineers shall furnish to the Authority in such detail as may be reasonably requested a statement of all items of cost and expense and fee with respect to which moneys were withdrawn from said account during the calendar month preceding the month in which such statement is issued. Concurrently with such statement, Kaiser Engineers shall furnish to the Authority as to each account an estimate of the amount which, together with any funds then remaining in said account, will be necessary to meet outstanding obligations and to pay costs and expenses and fee anticipated to be incurred or earned and withdrawn from said account

during the next succeeding three (3) calendar months. As soon as practicable, but in no event later than thirty (30) days after receiving such statement and estimates from Kaiser Engineers, the Authority shall deposit in said account an amount equal to the amount stated in the estimate. Upon completion of the Work Kaiser Engineers shall furnish the Authority with an accounting respecting said account and, upon receipt of payment of all reimbursable costs and expenses and fee payable hereunder, shall return to the Authority any unexpended balance. Said accounting and return of unexpended balance shall not limit Kaiser Engineers' right to subsequent reimbursement by the Authority of any unreimbursed costs and expenses and payment by the Authority of fee payable hereunder.

ARTICLE D - TAXES

Section D-1.

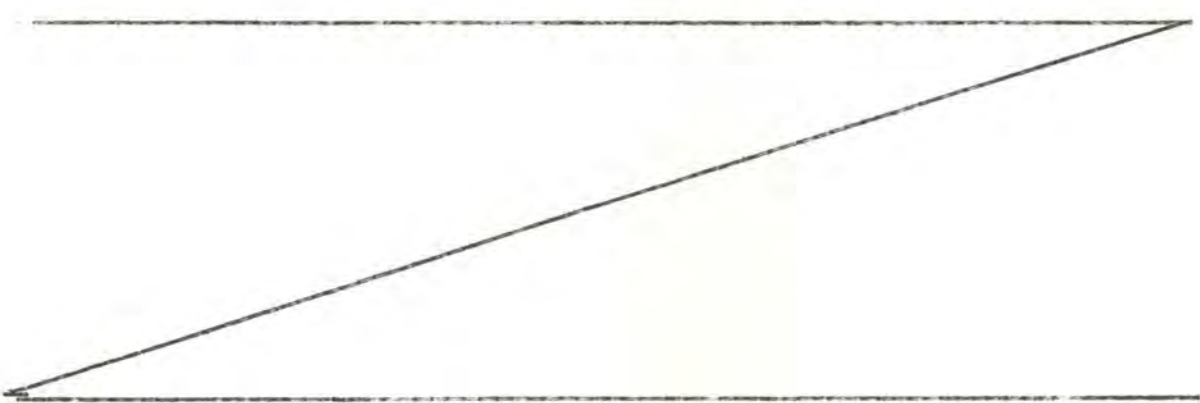
It is agreed that the Authority shall use its best efforts to make appropriate arrangements with the Government of Ghana so that no income or other taxes, or other charges in the nature of taxes, duties, fees, levies, assessments, contributions, compulsory savings, compulsory purchases of bonds, or similar items shall be imposed or withheld by the Republic of Ghana, any governmental body or political subdivision in Ghana on or from any compensation, whether fee or reimbursement of costs and expenses, paid or payable on account of the services performed hereunder or on the remission thereof from Ghana to the United States.

Similarly the Authority shall use its best efforts to make arrangements with the Government of Ghana so that the expatriate employees and consultants of Kaiser Engineers and its consultants shall be exempt from any and all income taxes, social welfare taxes, social welfare and unemployment insurances, compulsory savings, compulsory purchase of bonds, and such other taxes, deductions or withholds measured by or related to the income of any such employee, which are or may be imposed by the Republic of Ghana, by any governmental body or by any political subdivision in Ghana.

The Authority shall pay to Kaiser Engineers as reimbursable costs any amounts imposed or withheld contrary to this Section.

ARTICLE E - COMMENCEMENT AND COMPLETION

Kaiser Engineers shall commence performance of the services hereunder immediately upon execution of this agreement and initial deposit of funds as provided in article C thereof and shall be completed as soon as good practice and due diligence will permit.



ARTICLE F - TERMINATION

The Authority may, upon thirty days' written notice to Kaiser Engineers terminate this Agreement, in which event Kaiser Engineers shall, as soon as practicable, cease the performance of the services. Upon any such termination Kaiser Engineers shall be paid all its costs and expenses incurred in the performance of the Work, together with all the costs and expenses of demobilization, and the Authority shall pay to Kaiser Engineers that portion of Kaiser Engineers' fee as specified in Article C, which is attributable to Kaiser Engineers' performance of the services to the effective date of such termination.

ARTICLE C - GENERAL PROVISIONS

Section C-1 - Assistance by the Authority

The Authority shall assist Kaiser Engineers in the performance of the services hereunder. In particular, the Authority shall arrange that information, data, plans, reports, studies and any other relevant items be made to Kaiser Engineers promptly upon its request. Further, the Authority shall assist Kaiser Engineers in securing such rights of entry, permits, licenses, and authorizations as are required to permit and facilitate Kaiser Engineers' performance of the services within Ghana, Togo Dahomey and Nigeria.

Section C-2 - Ownership of Documents

All engineering information, including data furnished by the Authority to Kaiser Engineers shall remain the property of the Authority. All plans, specifications, reports and other documents of an engineering or design nature prepared hereunder by Kaiser Engineers, or under its supervision and relating to the services hereunder, shall be and remain the property of Kaiser Engineers;

*On basis furnish such
plans, specs, reports etc.*

provided, however, the Authority may freely make use of such plans, specifications, reports and other documents in the implementation of any project resulting from this study.

Section G-3.

Kaiser Engineers' records and books as to work performed or monies expended on liability incurred under this Agreement shall be kept on Kaiser Engineers' regular cost accounting basis and open to the Authority at all reasonable times for verification of billing and audit purposes. If requested by the Authority, Kaiser Engineers shall furnish to the Authority audited statements in form reasonably satisfactory to the Authority, certified by recognized and professionally qualified independent firms of accountants in respect of all costs incurred for which reimbursement has been claimed. Such accountants shall be appointed by Kaiser Engineers and approved by the Authority whose approval shall not be unreasonably withheld. The cost of such services shall be reimbursable under Section B-2

Section G-4.

Kaiser Engineers, in the performance of the Work, shall act as an independent contractor and not as an employee or agent of the Authority.

Section G-5.

All disputes, controversies and claims arising out of or relating to this Agreement, or the breach thereof, shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the Rules, with arbitration to be held in Ghana. Judgment upon the award rendered may be entered in any court having jurisdiction, or application may be made to such court for a judicial acceptance of the award and an order of enforcement, as the case may be.

Section G-6

The Authority shall for purposes of this Agreement and promptly upon the execution thereof designate and notify Kaiser Engineers of the person who shall be the Authority's representative and as such authorized to receive communications on behalf of the Authority and to issue on its behalf all instructions, authorizations and approvals hereunder. Kaiser Engineers shall designate and notify the Authority of the person who shall be Kaiser Engineers' representative and shall, among other things, be authorized to receive on behalf of Kaiser Engineers communications relating to the Work. Any party may from time to time by notice hereunder designate another official or person in substitution of its representative designated as herein provided.

Section G-7.

In the performance of The Work hereunder, Kaiser Engineers shall comply with all applicable laws and regulations of any country, and Kaiser Engineers' obligations hereunder are limited to those which are lawful. It is possible that the performance of the Work may be subject to the Export Control Regulations of the U.S. Department of Commerce, and to the extent that it is lawful and proper to do so, the Authority agrees to execute such documents now or hereafter required, including all required assurances, and to provide such assistance as is necessary to assure full and complete compliance at all times by the Authority and Kaiser Engineers with such Export Control Regulations and with any other applicable laws and regulations in the performance of the Work.

Section G-8.

With respect to any or all of the services hereunder, Kaiser Engineers shall have the right with the consent of the Authority, to assign to, or to effect a novation as of the date of this Agreement with, any of its affiliated Kaiser companies.

Section G-9

This Agreement shall constitute the entire agreement between the parties hereto and shall supersede all prior agreements and negotiations between the parties whether written or oral relating to the subject matter of this Agreement prior to the effective date of this Agreement.

This article requires the inclusion of the letter.

Section G-10.

The laws of Ghana shall govern the interpretation, validity and enforcement of this Agreement.

Section G-11.

- a. Kaiser Engineers shall secure and maintain Workmen's Compensation Insurance to provide benefits to its employees for work-incurred injuries, illnesses, or disabilities as required by applicable laws, or as normally carried by Kaiser Engineers on comparable projects if in excess of the requirements of such laws. Kaiser Engineers shall also secure and maintain employer's liability insurance to cover liability of Kaiser Engineers for injury, illness or disability of employees. Kaiser Engineers shall also secure and maintain Third Party Liability Insurance and such other insurance as is reasonably necessary in connection with the project.
- b. If the Authority maintains Physical Damage Insurance to cover the equipment required in the performance thereof, or requires third party contractors and/or subcontractors to carry such insurance, Kaiser Engineers shall be named as an additional insured under all such insurance policies.
- c. The cost to Kaiser Engineers of insurance maintained under this Article forms part of the costs reimbursable to Kaiser Engineers under Article B.

- d. Kaiser Engineers will furnish Certificates of Insurance maintained under this Article to the Authority. Such Certificates will provide for fifteen (15) days' prior notice to the Authority of any material change in, or cancellation of, the insurance covered thereby.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in six (6) counterparts, each of which shall be deemed an original, as of the _____ day of _____, 1970.

THE VOLTA RIVER AUTHORITY

By _____

Title _____

KAISER ENGINEERS INTERNATIONAL, INC.

By _____

Title _____

DRAFT 7/5/70

61864 Mr. Raizen



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA
Phone 64941

P. O. BOX M77,
ACCRA, GHANA

Our Ref: *231/4050*
Your Ref:

Date Rec'd. *June 15 1970* 8th June, 1970
Date Ack'd. *roughly needed aar June 17, 1970*
Assigned to *Wyatt (Raizen)*

A.A. Raizen, Esq.,
International Bank for
Reconstruction & Development,
1818 H. Street, N.W.,
Washington, D.C. 20433,
U.S.A.

GH-0-120

Dear Sir,

PRESIDENT'S REPORT AND APPRAISAL REPORT
ON THE VOLTA EXPANSION PROJECT

This is to acknowledge with thanks, the receipt of the copy of President's Report and the Appraisal Report on the Volta Expansion Project. I believe the copy you sent earlier must have been lost in the mail. I am sorry to have put you to so much trouble.

I hope I will be seeing you soon in Ghana.

Yours faithfully,

E.A.K. Kalitsi

(E.A.K. Kalitsi)
DIRECTOR OF FINANCE

TOLETA RIVER AUTHORITY



TOLETA RIVER AUTHORITY
1000 CHERRY STREET
DALLAS, TEXAS 75201

Office

City
State

TOLETA RIVER AUTHORITY
1000 CHERRY STREET
DALLAS, TEXAS 75201
.....

TOLETA RIVER AUTHORITY
1000 CHERRY STREET
DALLAS, TEXAS 75201
.....

This is to certify that the copy of the report of
the Toleta River Authority, dated and captioned as
above, is a true and correct copy of the original
report as filed in the office of the Secretary of State,
Dallas, Texas.

I have read the report and it is correct.

Very truly yours,

RECEIVED
JUN 15 1970

1970 JUN 15 AM 8:48

REGISTRARS

OFFICE MEMORANDUM

TO: Mr. G. Wyatt

DATE: June 4, 1970.

FROM: H.J. Nissenbaum *HJN*SUBJECT: GHANA: Implementation of Bank Projects

On June 23rd, we expect to present the proposed Eastern Region cocoa project for Ghana to the Executive Directors. At that time, it is anticipated that we may be asked to explain the limited expenditures on those Bank Group projects in Ghana, authorized some time back.

Could you each please give me a background statement on the rate of disbursements for the following loans/credits under your supervision? I would particularly appreciate your indicating the circumstances accounting for any slippages in scheduled disbursements and future prospects.

<u>Loan/Credit No.</u>	<u>Title</u>
118	Power Distribution
618	Power Expansion
5-7	Highway Engineering
160	Water Supply and Sewerage
163	Fisheries

HJN:jc

cc: J. North
R. Picciotto
V. Rajagopalan

61864
sig 11864
See Nissenbaum
Re: deal in
...

6186H

June 3, 1970

Mr. E. A. Minnig
Ambassador Hotel
Accra
GHANA

Dear Ted:

I attach copy of a letter dated May 16, 1970 from Mr. Kalitsi of VRA.

If Mr. Kalitsi has not already raised the matter with you, would you kindly take it up with him and try to find the reason for the cost overruns.

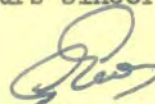
I suggest you avoid committing the Bank to any reallocation of costs, though it would be useful for you to discuss the possibilities of alternative financing as suggested by Mr. Kalitsi. However, please be firm on one thing and that is that the cost of the study on future development of VRA's generation must not be deleted from our loan. It is important that we should keep this under our surveillance in order to ensure that it is done properly.

Also attached is a copy of my reply to Mr. Kalitsi.

You will be glad to hear that Ali arrived in good shape and is resting at home on doctor's orders. He says he has all the essential information and has completed a first draft of his part of the report, which will only require minor revision in the light of some later figures you will be collecting. I hope he is right!

Watch those Jujus -

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Attachments

GEWyatt:jc

IBRD

cc: Mr. Nissenbaum

Central Files

Department Files(Control No. GH-O-112)

61864

June 3, 1970

Mr. E. A. K. Kalitsi
Volta River Authority
P.O. Box M77,
Accra
GHANA

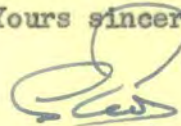
Dear Mr. Kalitsi:

Many thanks for your letter of May 16 from which I note the problem which has arisen due to the unexpectedly high bids for the Bank financed items of your expansion program.

I have asked Mr. Minnig to discuss this matter with you during his present mission, and when he returns and we have had time to consider his findings we will write you again.

We have no objection to your discussing the matter with the Canadian Government and U.S. AID as suggested in the second paragraph of your letter, but suggest you do not enter into any commitments with them until you hear from us again.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

GEWyatt:jc
IBRD

cc: Mr. Nissenbaum
Mr. Minnig
Central Files
Department Files (Control No. GH-0-112)

618 144

May 28, 1970

Mr. E.A.K. Kalitsi
Director of Finance
Volta River Authority
P.O. Box M77
Accra, Ghana

Dear Mr. Kalitsi:

I regret that as reported in your letter of 16 May 1970 you did not receive the copy of the President's Report and of the Appraisal Report on the Volta Expansion Project. Our mailing of last October must have gone astray. I am enclosing another set.

My best regards to you and Mr. Quartey.

Sincerely yours,

A.A. Raizen
A.A. Raizen

cc: Mr. Wyatt
Central Files
Department Files (Control No. GHA-O-105)

AARaizen/jm
IBRD

[Handwritten signature]

618 GH

Mr. Raisen



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA
Phone 64941

P. O. BOX M77,
ACCRA, GHANA

Our Ref. 1358/3522
Your Ref.

Date. 16th May, 1970.

Date Rec'd. May 26/70

Date Ack'd. Wyatt

Assig. ~~Shelton~~

Mr. A. A. Raisen,
I. B. R.D.,
1818 H Street, N.W.,
Washington D.C. 24033,
U. S. A.

Dear Mr. Raisen,

GHA-0-105

According to your letter of October 7, 1969 you were in the process of sending a copy of the President's Report and of the Appraisal Report on the Volta Expansion Project to me. As I have still not received those reports I am wondering whether they might have got lost in the mail. I will still like to read those reports and I will therefore be pleased to know if you could still let me have them.

Yours sincerely,

E.A.K. Kalitsi

VOLTA RIVER AUTHORITY



P.O. BOX 1177

ACCRA, GHANA

TELEPHONE 2000

EST. 1946 (REV. 1970)

Mr. ...

1970 ...

Dear Mr. ...

According to your letter of October 7, 1969, you were in the process of sending a copy of the President's report and the financial report on the Volta Dam project to me. I will still have not received these reports I am waiting for them to be sent to me. I will still like to see these reports and I will thank you be pleased to send them to me if you will let me have them.

Yours sincerely,

[Handwritten signature]

... ..

RECEIVED

1970 MAY 25 PM 2:51

COMMUNICATIONS SECTION



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Our Ref. 231/3521

Phone 64941

Your Ref.

Date. 16th May, 1970.

Mr. Gavin E. Wyatt,
I. B. R. D.,
1818 H Street, N.W.
Washington C.C. 20433,
U. S. A.

Dear Mr. Wyatt,

The last time Mr. Minnig was here, we pointed out to him that the revised estimates of cost of the major items under the Akosombo Expansion Programme, as presented by Kaiser, showed that the financing available from IBRD sources would be inadequate for the items which the Bank had agreed to finance. Now that the tenders for the Akosombo Expansion Project have all been opened, and Mr. John Weston of your Bank has also reviewed the cost estimates for the transformer station expansion projects, it has become clear that the shortage of financing available from IBRD has become even bigger.

Attached table shows the foreign cost component of the various contracts opened plus estimates of the foreign cost of the transformer station expansion project and the ancillary minor items, as compared with the amount of loan funds available from IBRD and CIDA. You will observe that, up to 1972, there is a deficiency in foreign financing of \$1,145,000 on the items financed by IBRD. We intend, when Mr. Minnig comes this month, to have a full review with him of the situation. In the meantime, we have approached the Canadian Government to find out the possibility of their increasing their financing to enable us to purchase 7 No. transformers estimated at N\$1.1 million for the transformer station expansion project 1970/72. We have also asked USAID to consider allowing us to purchase 4 No. circuit breakers and spares estimated at N\$250,000 out of the unexpended balance of \$4,00,000 available to VRA under USAID Loan 1962, DLF 187.

If these approaches are successful, we estimate that the deficiency of funds in the IBRD financed items will have been almost cleared. If these approaches are, however, not successful, it may be necessary for us to approach your Bank for additional financing to cover the deficiency.

We will appreciate receiving confirmation from you that your Bank will have no objections to our proceeding along the lines described above.

Yours sincerely,

E.A.K. Kalitsi
for: CHIEF EXECUTIVE

Encl:

618 GH

*Jim Wyatt
Power II*

INCOMING CABLE

Ghana

DATE AND TIME OF CABLE: **MAY 6, 1970** Date Rec'd. *May 6/70* 1210
 LOG NO.: **RC 52/6** Date Ack'd. *May 6/70*
 TO: **WYATT INTBAFRAD** assigned to *Wyatt*
 FROM: **ACCRA**

ROUTING
ACTION COPY: P. U. POWER II
INFORMATION PUBLIC UTILITIES PROJECTS
COPY:
DECODED BY:

TEXT: *GH - 0 - 97*

RE LOAN 618GH WE UNDERSTAND WE HAVE YOUR APPROVAL TO AWARD
 AKOSOMBO EXPANSION CONTRACT XA - 3M TO SADEMI, XS- 1 AND 2 TO
 SADEMI AND GRUPPO INDUSTRIE ELETRO, XA - 6 TO NEWTON CHAMBERS
 IN ACCORDANCE WITH CONSULTANT RECOMMENDATIONS ALREADY DELIVERED
 TO YOU PLEASE CONFIRM. XA - 6 SCHEDULED FOR SIGNATURE MAY 8

QUARTEY VOLTA

BF

COMMUNICATIONS
MAY 11 11 25 AM 1970

COMMUNICATIONS
MAY 6 11 52 AM 1970

TYPED

618 GH

Form No. 27
(3-70)

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: MAY 6, 1970

CLASS OF
SERVICE: LT

Wa.

COUNTRY: GHANA

TEXT: REYOURCAB MAY SIX STOP APPROVAL AWARD CONTRACT XA-6 GIVEN WITH OUR CABLE
Cable No.: AND LETTER TO YOU MARCH ELEVEN AND FOR CONTRACTS XA-3M, XS-1 AND XS-2
GIVEN WITH OUR CABLE AND LETTER TO YOU MARCH TWENTYTHREE REGARDS

WYATT
INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt
Chief, Power Division II
DEPT. Public Utilities Projects

SIGNATURE *Gavin E. Wyatt*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

REFERENCE:

CLEARANCES AND COPY DISTRIBUTION:

Messrs. Wyatt
Raizen
Memon
Central Files
Department Files
EAMinnig:dd
IBRD/IDA

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: *1*

April 29, 1970

Mr. E. L. Quartey
 Chief Executive
 Volta River Authority
 P.O. Box M 77
 Accra, Ghana

Dear Mr. Quartey

Re: Loan 618-GH
 Consultants for Study to review
development plans beyond 1977

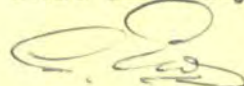
Thank you for your letter dated April 14, 1970 with which you sent us the terms of reference of the proposed study and advised us that after review of the proposals submitted you have invited Kaiser Engineers to discuss the terms of the proposed study.

To the terms of reference we have no comment to make. We would however appreciate being informed on the result of the negotiations and of the terms agreed upon. The Bank's acceptance of the consulting firm to be employed by you and of the terms and conditions of employment rests essentially on a judgment of the following:

- (i) The firm's experience, background and general organization must evidence its suitability for the work to be done; more importantly, the firm's specific work plan for the study must be adequate and the key personnel to be assigned must have the required experience and capability.
- (ii) The scope of work of the consultant must be in line with what is required.
- (iii) There must be a clear and reasonable definition and allocation of responsibility and authority between the borrower and the consultant.
- (iv) Other terms and provisions of the contract (in particular, payment provisions) must be reasonable and appropriate for the type of work in question.

We look forward to your further communication.

Yours sincerely,



Gavin E. Wyatt
 Chief, Power Division II
 Public Utilities Projects Department

EAMinnig:dd
 IBRD/IDA

cc: Messrs. Wyatt, Raizen, Reitter/Nissenbaum(W.Africa) Central Files; Dept. Files(GH-0-85)

SPECIAL DELIVERY 618 64



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Phone 64941

Our Ref. 231/2939

Your Ref.

Date. 23rd April, 1970

Mr. John P. Weston
International Bank for Reconstruction
and Development
1818 H Street N.W.
Washington D.C. 20433
U.S.A.

Dear Mr. Weston,

Thanks for your letter of April 16, 1970. It was when I came back from the seminar at the hotel Continental, that I got to know that rather unfortunately, you could not even get those papers I promised would be ready by the time you left our soil. I am terribly sorry for not being able to meet my promise, however, now all is over, and I am forwarding to you a copy each of the complete set of papers on cost and financing arrangements, load estimates etc. not being unaware of the fact that you have already in your possession some of these papers. But as a note of caution, I would like you to use as your working papers the present ones, as some of these are corrected versions of those which you took away.

Some of the figures have been changed and on sheets 4 and 5 for example, we have tried to limit expenditures to be financed by the World Bank and the Canadians to the level of the loan amounts granted. Any expenditure in excess of the loans secured have been earmarked to be financed by the VRA in theory. This has been done for a number of reasons: (1) to make relatively easier the interest calculation; (2) to forestall any imbalance in sources and application of funds forecast, should the Bank and the Canadians decide not to grant us any further loans for the expansion project; (3) even if these loans were increased there is the likelihood that the terms and conditions will change and therefore make all our working efforts useless; (4) should the VRA secure an alternative source of finance our problem would be reduced to inserting a new item for the new source and reducing only the VRA items.

.../.

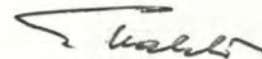
On the papers themselves we made certain assumptions some of which we have stated as footnotes, other assumptions made are:-

- Sheet 2:- We changed the energy figure for Valco for 1972 from 2,630 GWH to 2,186 GWH. This is because if anything at all Valco will start using 315 MW of power towards the end of the year. Thus we assumed that for the year it will use the same energy as it used in 1971 but then in December 1972 it will use an extra 219 GWH which is $\frac{1}{12}$ of 2,630 GWH.
- Sheet 6:- For the calculation of the principal and interest payable on the Italian loan we are attaching a copy of the terms under which the Italian loan is being relent to the VRA by the Ghana Government.
- Sheet 7:- To enable us calculate the depreciation from 1970 upwards we assumed a 2.6% depreciation of the fixed assets in operation.

On the details on staff employed the picture could not come off as nicely as anticipated; we are still working on it and I would have it mailed to you as soon as it is completed.

I hope by now your foot has got or is getting better and that you can walk painlessly. I wish you a speedy recovery. Looking forward to seeing you under more favourable circumstances

Yours sincerely,



E.A.K. Kalitsi

618 GH *M. Manning*



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Our Ref. *231/2753*

Phone 64941

Your Ref.

Date. April 14, 1970.

Date Rec'd. *April 23/70*

Date Ack'd. *April 29/70*

Assigned to *Wyatt*

Mr. Gavin E. Wyatt,
Chief, Power Division II,
Public Utilities Projects Department,
International Bank for Reconstruction
and Development,
1818 H Street N.W.,
Washington, D.C. 20433,
U.S.A.

Dear Sir,

GH-0-85

Loan No. 618-GH

Your letter dated April 2, 1970, on Section 5.01(b)(ii)(B) of the above loan refers.

In accordance with the terms of the agreement we had invited five Consultants to submit proposals for carrying out the studies in accordance with the terms of reference contained in our invitation, a copy of which is herewith attached for your information.

After reviewing the submissions we have invited Kaiser Engineers, one of the firms who submitted the most attractive proposals, to come to Accra on April 22, 1970, for discussions on their terms. Should we, however, find ourselves unable to reach ~~an~~ agreement with Kaiser Engineers we have a second Consultant in view to negotiate with.

The above gives a summary of the present situation regarding our efforts under Section 5.01(b)(ii)(B) of the Loan Agreement.

With kindest regards,

Yours truly,

E. L. Quartey
E. L. Quartey
CHIEF EXECUTIVE

Encl:

VOLTA RIVER AUTHORITY



P.O. BOX 1111
ACCRA GHANA

COMMUNICATIONS SECTION

YOUR REF: 1970 APR 22 AM 9:07
YOUR REF: 1970 APR 22 AM 9:07

DATE: APR 11, 1970

Mr. David ...
Chief, Power Division II,
Public Utilities Projects Department,
International Bank for Reconstruction
and Development,
1818 M Street N.W.,
Washington, D.C. 20036

Dear Sir,

Loan No. 618-11

Your letter dated April 2, 1970, on section 2.01(d)(ii) of the
above loan is received.

In accordance with the terms of the agreement we had invited five
consultants to submit proposals for carrying out the studies in accor-
dance with the contract reference contained in our invitation a copy of
which is herewith attached for your reference.

After reviewing the proposals we have invited better engineers
one of the firms who submitted the most extensive proposals to come to
Accra on April 22, 1970, for discussions on their terms. Should we how-
ever find ourselves unable to do so an agreement with better engineers
we have a second contract which is attached for your reference.

The above shows a summary of the present situation regarding our
efforts under section 2.01(d)(ii) of the loan agreement.

With kindest regards,

RECEIVED

1970 APR 22 AM 9:07

COMMUNICATIONS SECTION

Gentlemen:

INVITATIONS FOR CONSULTANTS PROPOSALS FOR V.R.A.
POWER DEVELOPMENTS OF THE AKOSOMBO EXPANSION

You are invited to submit a proposal to provide engineering services for the economic evaluation of VRA's alternative means to meet power requirements after completion of the Akosombo Power Plant to its full capacity of 882 MW. The foreign exchange cost will be financed by the International Bank for Reconstruction and Development out of the proceeds of the current Loan 618-GH.

We attach the terms of reference outlining the activities the consultant would be expected to undertake. In your submission it would be appreciated if the activities under (e) and (f) of the terms of reference be treated separately even though personnel dealing with these would also be engaged on the other activities.

We also attach background information to give an idea of VRA's present status. We consider it important that any firm wishing to submit a proposal should have first-hand knowledge of conditions in Ghana. No proposals submitted will be considered unless the firm already has a good knowledge of the Ghanaian power sector obtained from recent visits of its personnel or visits to Ghana to obtain such knowledge prior to submitting a proposal.

which Given the broad nature of the services to be provided and the implications of reaching international agreements, firms may not have the full range of expertise, personnel and experience required within their own organizations. For this reason, there is no objection to firms submitting proposals on the basis of association with additional firms to provide the appropriate strengths or hiring, for this purpose, specialists.

Since English is the working language in Ghana and Nigeria and French in Togo and Dahomey, it will be most desirable for the members of the consulting team to be fluent in English and French.

In submitting your proposal you should, among other things, provide the following information:

- A. A brief description of the firm (firms) and an outline of experience with assignments of a similar nature.
- B. The composition of the team and of experts which would visit Ghana in connection with specific assignments. Included should be a brief dossier of each individual giving age, education, language in which fluent, history of working assignments, international experience, the chief function has or functions responsible for or dealt with, and the relevance of his experience to undertake these assignments.

You are also invited to make comments or suggestions concerning the terms of reference. The attached terms of reference are preliminary only and the final version will be prepared with the consultants when the contract for the services is being negotiated. Any views you have on the manner the work is to be executed and this assignment undertaken would be wellcome.

The selection of consultants of this project will be primarily made on the basis of capability, that is, past experience, personnel, scope of international experience and home office back-up. We wish to emphasize that in submitting your proposal you should not submit the financial conditions for providing your services. The intention is that after a tentative selection has been made the price will be negotiated on a cost plus fee basis.

We should appreciate confirmation that you have received this invitation together with an indication of whether you plan to submit a proposal. The deadline for submission of proposals is February, 15th 1970. It is expected that final negotiations will be concluded by April 15th, 1970 and studies should be completed by December, 1st 1970.

Very truly yours,

E. L. Quartey
Chief Executive
VOLTA RIVER AUTHORITY

BACKGROUND INFORMATION

The Volta River Authority (VRA)

1. The VRA is an autonomous statutory corporation established in 1961 to develop the Volta River area. Under the Volta River Development Act 1961 VRA is empowered to go well beyond the boundaries of the power sector, making it an integrated regional development agency. The eight-man Board of Directors is appointed for terms of three years by the President of the Republic, who is Chairman ex-officio. The other members are the Chief Executive of VRA, the Managing Directors of the Electricity Corporation of Ghana (ECG) and of the Volta Aluminum Company (VALCO) respectively, and four members, one of whom shall have had experience in financial matters may be appointed as a finance member.
2. Two organizations, VRA and ECG are charged with public generation, transmission, and distribution of power. Under the Volta River Development Act, VRA is responsible for bulk supplies to the aluminum smelter, ECG, the mines, and Akosombo Township. ECG is responsible for distribution of VRA power in Southern Ghana and the generation and distribution of diesel power in areas that cannot as yet be economically connected to the VRA transmission system.
3. The Volta River Project owned and operated by VRA - Akosombo Power Plant - has presently four 128/147 MW units installed. Provisions were made for the installation of two additional units, which would complete the power station and raise installed capacity to 882 MW. These two additional units are scheduled for commissioning in 1972. The average annual energy available from the Volta River Scheme is 5,400 GWh.
4. VRA also owns and operates a 500 mile 165 kV transmission ring serving the VALCO smelter; ECG systems in the main towns of Accra, Tema, Sekondi-Takoradi, and Kumasi; a number of smaller towns and villages; and gold and diamond mines at Tarkwa, Prestea, Dunkwa, Obuasi and Akwatia.
5. The completed power plant at Akosombo is expected to meet power market requirements until 1977. At that time VALCO may exercise a final option, installation of the fifth pot-line and increase its demand from 295 MW to 370 MW. To meet this increase and also the increase from the normal growth of ECG and other consumers, VRA will need to provide additional generating capacity. Various potential hydro developments on the Volta, Pra, and Tano Rivers have been investigated in various degrees of detail in the past. Although indigenous fuel does not exist, it would also be possible to install thermal capacity. A third possibility would be an interconnection with Nigeria thus postponing major investments in Ghana for generating facilities for a number of years.

6. Recently an agreement between Ghana, Togo and Dahomey was signed for the sale of VRA power to Togo and Dahomey. The necessary transmission and substation facilities are scheduled to be in operation by late 1971. The 185 miles long 165 kV double circuit transmission line from Akosombo to Lome (Togo) and Cotonou (Dahomey) is estimated to have a transmission capability of about 200 MW. It has also been estimated that by 1982 the combined Togo and Dahomey demand would reach about 50 MW.

7. To determine the most economic way to meet future load growth after 1977 VRA has decided to invite consultants to submit a proposal for engineering consulting services for future generation expansion. The foreign exchange cost element of these services will be eligible for disbursement under the current Loan 618-GH from the International Bank for Reconstruction and Development.

TERMS OF REFERENCE

1. The following are Terms of Reference under which would be provided engineering services for a feasibility study of future generation requirements to meet VRA's demand after 1977. The foreign exchange cost of this study will be financed by the International Bank for Reconstruction and Development from the proceeds of the current Loan 618-GH.
2. The consulting firm would provide engineering services as follows:
 - (a) Review VRA's load forecast for the period 1969-1982
 - (b) Determine generating capability and annual energy generation of the Akosombo Project.
 - (c) Review existing feasibility reports of hydro-electric projects to determine whether one or other of these projects could be selected as the next step in the development of Ghana's hydro potential.
 - (d) Review the capability of the transmission line currently under construction between Ghana, Togo and Dahomey.
 - (e) Assist and advise VRA in negotiations with Nigeria to determine
 - i) available capacity, if any that could be placed at VRA's disposal year by year if the transmission line under(d) above were extended to connect with the Nigerian system; and
 - ii) the terms at which Nigerian generating capacity would be made available to VRA.
 - (f) Assist and advise VRA in negotiations with Togo and Dahomey on the use of transmission facilities within these two countries and the terms of such use.
 - (g) Based on the above prepare an economic evaluation of the following alternatives:
 - i) the most promising hydro-electric development;
 - ii) an interconnection with Nigeria; and
 - iii) a thermal power plant.

In the evaluation consideration should also be given to the possible reduction of reserve system capacity to Nigeria and Ghana and to the resultant postponement of major investments in generating facilities in Ghana in the event of inter-connection. The discounted cash flow analysis should be used and the equalizing discount rate of the various alternatives determined.

(h) The various projects should be investigated in sufficient detail to enable a reasonable cost estimate and annual expenditures to be established.

(i) The consultant's report should end with a recommendation on the alternative to be selected.

3. The Terms of Reference outlined above are preliminary only. They would be finalized when the contract for consulting services is negotiated.

April 2, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M 77
Accra
GHANA

Loan No. 618-GH

Dear

You will recollect that Section 5.01(b)(ii)(B) of the above Loan Agreement requires the VRA to engage consultants acceptable to the Bank and on terms and conditions satisfactory to the Bank, for the purpose of reviewing your future expansion plans and making recommendations not later than December 31, 1971. We have already discussed with you the need for such a study to consider the possibilities of interchanges of power in the future between Ghana and both Nigeria and Ivory Coast, both of which could conceivably have hydro and/or thermal power available for sale to you at lower prices than you could provide from future projects in Ghana.

I raise this with you now not because of any desire to accelerate your plans to put the loan covenant into effect, as there is still plenty of time to carry out the work; but because the question of inter-connection with your neighbors has arisen in the general context of Regional Development, and care will be needed to ensure that there is no overlapping of terms of reference in consultants' terms of reference.

I would be most grateful if you could let me know the present situation and the plans you are making for the carrying out of this important study, and if possible an outline of the terms of reference you propose.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

GEWyatt:jc
IBRD

cc: Mr. Gue
Mr. Engelmann
Mr. Minnig
Mr. Wyatt
Central Files
Department Files

310 GH
✓ CC 618 GH

March 30, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M 77
Accra, Ghana

Re: Loan No. 310 GH (Volta Project)
Loan No. 618 GH (Volta Expansion Project)

Dear Mr. Quartey:

Thank you for your letter of March 11, 1970 enclosing the text of the draft bill amending Section 3 of the Volta River Development Act, 1961. The World Bank has no objection to the draft bill enclosed with your letter.

With best regards,

Sincerely yours,

3

Roger Chaufoournier
Director
Western Africa Department

TC
HJH
Tolydo/HMissenbaum/bb
cc: Messrs. Minnig, Raizen

3106H
cc 6186H

G.F.

Mr. Nissenbaum

March 27, 1970

Thomas M. Clyde

Loans No. 310 GH and 618 GH: Proposed amendment to Volta River
Development Act, 1961

I have reviewed the draft bill amending § 3 of the Volta River Development Act, 1961, enclosed with Mr. Quartey's letter of March 11, 1970. The language of the draft bill is consistent with the principle of the amendment communicated to the Bank at the turn of the year, and I feel that we should approve it.

I have spoken to Joseph Gainer at Export-Import Bank and Arthur Fell at AID, the lawyers who work on the Volta River project for those organizations. Export-Import Bank has apparently not received the draft bill, and AID approved the principle of the amendment without requesting a chance to review the text. I have sent copies of the text to them both for their information.

I am attaching a draft of a reply to Mr. Quartey's letter to be signed by either Mr. Chaufournier or Mr. Cheek.

Attachment

cc: Mr. Minnig
Mr. Raizen

TMC
TMClyde:ep

310 GH
✓ CC 61864

March 26, 1970

Mr. Arthur M. Fell
General Counsel, Africa
Agency for International Development
Room 3536
2201 C Street, N.W.
Washington, D.C.

Re: Loan No. 310 GH (Volta Project)
Loan No. 618 GH (Volta Expansion Project)

Dear Mr. Fell:

As we discussed this afternoon I am enclosing a copy of Mr. Quartey's letter to us of March 11, 1970 enclosing the draft bill amending § 3 of the Volta River Development Act, 1961.

The wording of the draft bill is consistent with the principle communicated to us at the turn of the year, and we plan to consent to it.

Sincerely yours,

Thomas M. Clyde
Attorney

Enc.

TMC
TMC Clyde:ep

310 GH
✓ cc 618 GH

March 26, 1970

Mr. Joseph Gainer
Legal Department
Export-Import Bank of Washington
811 Vermont Avenue, N.W.
Washington, D.C.

Re: Loan No. 310 GH (Volta Project)
Loan No. 618 GH (Volta Expansion Project)

Dear Joe:

As we discussed this afternoon I am enclosing a copy of Mr. Quartey's letter to us of March 11, 1970 enclosing the draft bill amending § 3 of the Volta River Development Act, 1961.

The wording of the draft bill is consistent with the principle communicated to us at the turn of the year, and we plan to consent to it.

Best regards.

Sincerely,

Thomas M. Clyde
Attorney

Enc.

TMC
TMClyde:ep

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: MARCH 23, 1970

CLASS OF
SERVICE: LT

WUI

COUNTRY: GHANA

TEXT: EVALUATION REPORTS CONTRACTS XA-3M AND XS-1 AND XS-2 RECEIVED MARCH EIGHTEEN
Cable No.: STOP WE HAVE NO OBJECTIONS AWARD AS RECOMMENDED BY YOUR CONSULTANT STOP
CONTRACT XA-3M TO SADELMI ESTIMATED VALUE NEW CEDI 2395380 EQUIVALENT OF
WHICH LOCAL CURRENCY NEW CEDI 720506 COMMA ITALIAN LIRA NEW CEDI 1323874
EQUIVALENT COMMA US DOLLARS NEW CEDI 351000 EQUIVALENT AND CONTRACTS XS-1
AND XS-2 TO SADELMI AND GEI FOR ESTIMATED VALUE ITALIAN LIRA 372776687.50
AND NEW CEDI 492215 RESPECTIVELY

REGARDS
WYATT

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt
Chief, Power Division II
DEPT. Public Utilities Projects


SIGNATURE 
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

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Messrs. Wyatt
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Memon
Nissenbaum (W. Africa)
Bennett (Controllers)
Central Files
Department Files
E. Winnig:dd
IBRD/IDA

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: 

March 23, 1970

Mr. E. L. Quartey
Volta River Authority
P.O. Box M 77
Accra, Ghana

Dear Mr. Quartey:

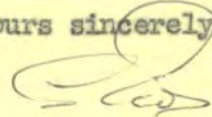
Re: Loan 618-GH
Akosombo Expansion

This letter confirms today's cable re award XA-3M, XS-1 and XS-2 contracts as follows:

"EVALUATION REPORTS CONTRACTS XA-3M AND XS-1 AND XS-2 RECEIVED MARCH EIGHTEEN STOP WE HAVE NO OBJECTIONS AWARD AS RECOMMENDED BY YOUR CONSULTANT STOP CONTRACT XA-3M TO SADEMI ESTIMATED VALUE NEW CEDI 2395380 EQUIVALENT OF WHICH LOCAL CURRENCY NEW CEDI 720506 COMMA ITALIAN LIRA NEW CEDI 1323874 EQUIVALENT COMMA US DOLLARS NEW CEDI 351000 EQUIVALENT AND CONTRACTS XS-1 AND XS-2 TO SADEMI AND GEI FOR ESTIMATED VALUE ITALIAN LIRA 372776687.50 AND NEW CEDI 492215 RESPECTIVELY"

We are sending a copy of the above cable and this letter to your Consultants, Henry J. Kaiser Company.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

EAMinnig:dd
IBRD/IDA

cc: Henry J. Kaiser Company
Messrs. Bennett (Controllers)
Nissenbaum (W. Africa)
Wyatt
Raizen
Central Files
Department Files

7 COMMUNICATIONS
SECTION

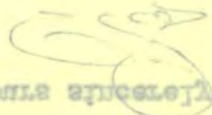
Department Files
Central Files
Hetzler
Maff
Magsenrally (M. Veltse)
Messala Bennett (Comptroller)
cc: Henry J. Ketzler Comberly

1970 MAR 24 PM 5:04

REIVED

INSD\LDV
EVALUATE:db

LETTER PERTAINING PROJECTS DEPARTMENT
OFFICE HOMER BRANTON II
GENERAL E. MAFF



HOMER BRANTON II

LETTERS HENRY J. KETZLER COMBERLY

RE THE MATTER OF THE SALE OF THE ABOVE SERVICE AND THE LETTER TO YOUR COM-

REGISTRATION

ESTABLISHED UNDER LEGISLATION THAT IS SUBJECT TO THE NEW CREDIT SYSTEM
FOR THE REGISTRATION AND COMPLETION OF THE X-1 AND X-5 TO BE DETERMINED AND SET FOR
LEGISLATION THAT THE NEW CREDIT SYSTEM IS SUBJECT TO THE NEW CREDIT
SYSTEMS OF WHICH THERE ARE SEVERAL NEW CREDIT SYSTEMS
COMPLETION OF THE COMPLETION OF THE X-1 TO BE DETERMINED UNDER THE NEW CREDIT
SYSTEMS OF WHICH THERE ARE SEVERAL NEW CREDIT SYSTEMS
RECOMMENDED BY YOUR
REGISTRATION BEFORE COMPLETION OF THE X-1 AND X-5 BEING DETERMINED

COMPLETION OF THE

THE LETTER COMPLETION OF THE X-1, X-2 AND X-5

APPROVED FOR SIGNATURE

RE: JOHN ETG-CH

DEPT. OF JUSTICE:

OFFICE OF THE
P.O. BOX 11
DOCTRINE AND PRACTICE
RE: E. J. KETZLER

MAR 23 1970

March 23, 1970

Mr. J. K. Taylor
 Manager
 Washington Office
 Henry J. Kaiser Company
 900 17th Street, N.W.
 Washington, D.C. 20006

Dear Mr. Taylor:

Re: Loan 618-GH
 Volta River Authority
Akosombo Expansion

Thank you for your letter of March 16, 1970 which we received on March 18, 1970 in reference to the Evaluation Reports of bids for Contracts XS-1 and XS-2, Supply and Installation of Equipment for Volta and Smelter Substations and Contracts XA-3M and XA-3E, Power Plant, Installation of Mechanical and Electrical Equipment.

Please find enclosed for your information copies of today's cable and letter to the Volta River Authority.

Yours sincerely,

Gavin E. Wyatt
 Chief, Power Division II
 Public Utilities Projects Department

Enclosures

EAMinnig:dd
 IBRD/IDA

cc: Messrs. Wyatt
 Raizen
 Central Files
 Department Files (GH-0-61)

Department LTTC (GH-0-07)
Central LTTC COMMUNICATIONS
SECTION

cc: Messrs. Maff

IBFD\IDV
EVIDENCE:qq

1970 MAR 24 PM 5:04

ENCLOSURES

RECEIVED

LTTC ATTORNEY GENERAL DEPARTMENT
CITE: BOMER DEPARTMENT II
GEARY E. MAFF

LONG ENCLOSURE

and letter to the above stated address.

Please find enclosed long information copies of records, a copy
reproduction and description of information.

Reference and contracts XV-3H and XV-3E, BOMER DEPT. INFORMATION of
and X2-5, copy and description of information for above and further in-
to in reference to the information records of above for contracts X2-1

Thank you for your letter of March 19, 1970 which we received on March

Enclosure
LONG ENCLOSURE
Re: BOMER DEPT-CH

DEPT. OF JUSTICE

Washington, D.C. 20530
800 Third Street, N.W.
Room 1, Federal Building
Washington Office
Room 1, K. Building

MAR 23 1970

618GH

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

March 16, 1970

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

Date Rec'd. Mar 18 /70
Date Ack'd. March 23 /70
Assigned to [Signature] !!!

GH-0-61

Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo Expansion.

Enclosed are two copies of Contract No. XS-1 and XS-2, Recommendation for Award as well as two copies of Contract No. XA-3M and XA-3E, Recommendation for Award.

DOC No 2

DOC No 3

Sincerely yours,

Jesse K Taylor

Jesse K. Taylor
Manager, Washington Office

Encl.

JKT:kw

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

Jan 18 11

11/18

CH 2-2

RECEIVED
1970 MAR 17 PM 12:12

COMMUNICATIONS
SECTION

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: MARCH 13, 1970

CLASS OF SERVICE: LT

WU1

COUNTRY: GHANA

TEXT:
Cable No.:

REURCAB 13th MARCH CONFIRM 20th CONVENIENT FOR DISCUSSION WESTON

REGARDS

WYATT

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin Wyatt
Chief, Power Division II
DEPT. Public Utilities Projects

SIGNATURE *[Signature]*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

JPWeston:ps

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

CLEARANCES AND COPY DISTRIBUTION:

cc: JPWeston
Central Files

For Use By Communications Section

Checked for Dispatch: *[Signature]*

ORIGINAL (R/R COPY)

ORIGINAL (R/R COPY)

1. Message No.

RECEIVED

(SIGNATURE OF PERSON AUTHORIZED TO APPROVE)

SIGNATURE

DATE

TIME

APPROVED BY

DATE

TIME

APPROVED BY

MAR 13 12 17 PM 1970
COMMUNICATIONS

DISPATCHED

DISPATCHED

(FOR USE BY COMMUNICATIONS SECTION)

MAR 13 12 56 PM 1970
COMMUNICATIONS

DATE

APPROVED BY

NOT TO BE TRANSMITTED

RECEIVED

RECEIVED

APPROVE FOR MARCH COMBINE SOFT CONTACTS FOR DISCUSSION AREA

DATE

TIME

DATE

TIME

APPROVED BY

DATE

DATE

TIME

APPROVED BY

MAR 13

MARCH 13 1970

OUTGOING WIRE

RECEIVED

RECEIVED

RECEIVED

RECEIVED

RECEIVED

RECEIVED

MAR 13

61864

I N C O M I N G C A B L E

DATE AND TIME OF CABLE: **MARCH 13, 1970 1050**

LOG NO.: **RC 26 / 13**

TO: **WYATT INTBAFRAD**

FROM: **ACCRA**

R O U T I N G	
ACTION COPY:	PU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

**REURCAB 10TH MARCH. 18TH MARCH UNSUITABLE OWING TO VRA BOARD MEETING.
SUGGEST 19TH OR 20TH MARCH FOR DISCUSSION WITH WESTON. ADVISE DATE
PREFERABLE**

QUARTEY VOLTA ACCRA

JAO

COMMUNICATIONS
MARCH 13 8 51 AM
JAO

TYPED

MAR 13 9 39 AM 1970
COMMUNICATIONS

370

COMMUNICATIONS SECTION

URGENT

TO DIRECTOR (100-442611) FROM SAC, NEW YORK (100-100000) 1P
RE NEW YORK TELETYPE TO BUREAU, MARCH TWELVE LAST.

NY 100

NY 100

NY 100

NY 100

NY 100

NY 100

NY 100

SEARCHED	INDEXED
SERIALIZED	FILED
MAR 13 1970	
FBI - NEW YORK	

COMMUNICATIONS SECTION

61864

Ghana
Mr. Wyatt
Mr. Manning

INCOMING CABLE

DATE AND TIME OF CABLE: **MARCH 13, 1970 1050**

LOG NO.: **RC 26 / 13**
TO: **WYATT INTBAFRAD**
FROM: **ACCRA**

ROUTING	
ACTION COPY:	PU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

**REURCAB 10TH MARCH. 18TH MARCH UNSUITABLE OWING TO VRA BOARD MEETING.
SUGGEST 19TH OR 20TH MARCH FOR DISCUSSION WITH WESTON. ADVISE DATE
PREFERABLE**

QUARTEY VOLTA ACCRA

Date Rec'd. Mar 13/70
Date Ack'd. No answer req.
Assigned to Wyatt

37A - 0 - 54

JAO

Weston already aware of change Jim

COMMUNICATIONS
MAR 13 3 33 PM 1970

RECEIVED

TYPED

MAR 13 9 39 AM 1970
COMMUNICATIONS

[Faint handwritten notes]

[Handwritten: 2-24 AM]

[Handwritten: 12:15]

[Handwritten: Mark]

[Handwritten: Jonathan]

COMMUNICATIONS SECTION

TO: [Faint text]
FROM: [Faint text]
SUBJECT: [Faint text]

DATE: 3/13/70
TIME: 9:39 AM

RECEIVED [Faint text]
MAR 13 1970

COMMUNICATIONS SECTION

COMMUNICATIONS SECTION

[Handwritten signature and notes]

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL DEVELOPMENT ASSOCIATION

ROUTING SLIP

Date

INCOMING MAIL

Agric. Projects	A517	Population Proj.	B408
Mr. Bart	A700	Mr. Povey	C711
Mr. Burney	A1019	Mr. Powell	C911
Mr. Consolo	D1117	Pub. Util. Proj.	A343
Controller's		Mr. Ram	C708
Mr. D. A. de Silva	C611	Mr. Reamy	D731
Mr. Dahlberg	D1110	Mr. Reitter	C708
Development Serv.		Mr. D. Richardson	B709
Director, Projects		Mr. Roulet	A616
E.D.I.		Mr. Sandberg	C608
Educ. Projects	A637	Secretary's	
Mr. Eschenberg	B600	Mr. Sekse	C1224
Mr. Frost	C813	Mr. Skillings	A849
Mr. Gibbs	C616	Mr. Southall	C1203
Mr. Glaessner	C815	Special Proj.	A210
Mr. Gue	C714	Mr. Springuel	A718
Mr. Gustafson	C919	Staff Relations	
Mr. Halbe	B1012	Statistics Div.	
Mr. Hornstein	C508	Mr. Thalwitz	C719
Mr. Horsley	B714	Mr. Tolbert	C624
Mr. Husain	A538	Mr. Tolley	B1002
Industrial Proj.	A201	Tourism Proj.	D625
Info. & Pub. Affairs	D900	Trans. Projects	A418
Internal Auditor	A236	Travel Office	C201
Mr. Jentgen	C608	Treasurer's	
Mr. Kirk	A622	Mr. Upper	B704
Mr. Kraske	A614	Mr. Van Wagenen	D1114
Mr. Kruithof	B1007	Mr. Wiehen	B608
Mr. Michaels	D1111	Mr. Wilkinson	C719
Mr. Mirski	C1011	Mr. Wyss	A1122
Mr. Mirza	C807	Mr. Zinman	C809
Mr. Nelson	C802		
Off. Services Div.			
Mr. Paijmans	A735		
Personnel Div.	D1002		
Mr. Pollan	C915		

Remarks



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

Phone 64941

P. O. BOX M77,
ACCRA, GHANA

Our Ref. 000/1678

Your Ref.

Date. 11th March, 1970

International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington 25, D.C.

Dear Sirs,

AMENDMENT TO VOLTA RIVER DEVELOPMENT ACT

We refer to your cable advising us, in reply to our letter of the 31st December, 1969, that you have no objection in principle to the amendment of the Volta River Development Act, in the manner outlined in our said letter but that you would like to see the text of the proposed amendment before giving your formal consent.

We have now received from the Government the text of the draft Bill for the amendment and we enclose a copy herewith for your consideration and formal consent.

Yours faithfully,

E.L. Quartey
CHIEF EXECUTIVE

Enc.

NOTTA RIVER AUTHORITY



50 BOX WAY
ACOLA GHANA

Cables - 0277 1277

Phone 2224

Our Ref

Your Ref

Date

Information regarding the
proposed project
is available at the
office of the Authority

NOTTA RIVER AUTHORITY

The Authority is pleased to
inform you that the
proposed project is
being implemented
in accordance with
the provisions of the
Act. The project
will be completed
by the end of the
year.

RECEIVED

1970 MAR 17 AM 8:59

COMMUNICATIONS
SECTION

DRAFT OF A BILL
ENTITLED

THE VOLTA RIVER DEVELOPMENT (AMENDMENT)
ACT, 1970

AN ACT to amend the Volta River Development Act, 1961
(Act 46).

BE IT ENACTED by the Presidential Commission and the National
Assembly in this present Parliament assembled as follows:-

Act 46
amended.

(1) The Volta River Development Act 1961 (Act 46) as amended by
the Volta River Development Act, 1961 (Amendment) Decree, 1968
(N.L.C.D.268) is hereby further amended by the substitution for
section 3 thereof of the following new section:-

"Constitution
of the Autho-
rity

3. (1) The Authority shall consist
of a Chairman, the Chief Executive
appointed under section 5 of this Act
and six other persons of whom one, who
shall have had experience in financial
matters may be appointed as Finance
Member, and two shall be appointed to
represent major consumers of the
electrical power to be generated by the
Authority.

(2) Subject to section 5 of this
Act, the Chairman and other members of
the Authority shall be appointed by the
President acting in accordance with the
advice of the Prime Minister.

(3) At every meeting of the Authority
at which he is present, the Chairman shall
preside and in his absence a member elected
by the members present from among themselves
shall preside."

(2) Paragraph 1 of the said Volta River Development Act, 1961
(Amendment) Decree, 1968 (N.L.C.D.268) is hereby repealed.

61854

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

March 16, 1970

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo
Expansion.

Enclosed are two copies of Contract No. XS-1 and XS-2, Recom-
mendation for Award as well as two copies of Contract No.
XA-3M and XA-3E, Recommendation for Award.

Doc No 2

Sincerely yours,

Doc No 3

Jesse K. Taylor
Jesse K. Taylor
Manager, Washington Office

Encl.

JKT:kw

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: MARCH 11, 1970

CLASS OF
SERVICE: LT

W

COUNTRY: GHANA

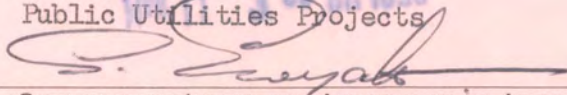
TEXT: RECEIVED EVALUATION CONTRACT KA-6 HOISTS AND TRASHRACKS MARCH TEN STOP
Cable No.: BANK HAS NO OBJECTION TO AWARD AS PROPOSED BY YOUR CONSULTANTS TO NEWTON
CHAMBERS ENGINEERING LTD FOR POUND STERLING 48689.50 OR POUND STERLING
51471.91 INCLUDING ERECTION SERVICES AND POSSIBLE ESCALATION REGARDS

WYATT
INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt
Chief, Power Division II
DEPT. Public Utilities Projects

SIGNATURE 
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:
cc: Messrs. Bennett (Controllers)
Nissenbaum (W. Africa)
Wyatt
Raizen
Central Files
Department Files
Henry J. Kaiser Co., Washington Office
EAMinnig:dd
IBRD/IDA

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: 

ORIGINATOR (MIME COPY)

CREATED BY (MIME COPY)

RECEIVED

DISPATCHED

MAR 11 3 21 PM 1970

MAR 11 3 33 PM 1970

COMMUNICATIONS

COMMUNICATIONS

cc: [illegible]

RECEIVED BY (MIME COPY)

RECEIVED
LEVEL

[Faint, mostly illegible text, possibly a list or report]

[Faint text on the left margin]

TO: [illegible]

DATE: [illegible]

TIME: [illegible]

ORIGINATOR (MIME COPY)

[illegible]	[illegible]	[illegible]
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[Handwritten mark]

618617

OUTGOING WIRE

TO: KALITSI
VOLTA RIVER AUTHORITY
ACCRA

DATE: MARCH 10, 1970

CLASS OF
SERVICE: NLT

2001

COUNTRY: GHANA

TEXT:
Cable No.:

WOULD LIKE SEE YOU DISCUSSION ON HOUSING SOCIAL SECTORS WEEK
MARCH 16

REGARDS

KAMRANY
INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME N. Kamrany *nk*

DEPT. Western Africa - Div. B

NKamrany/prc

SIGNATURE *[Signature]*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:

COMMUNICATIONS
MAR 10 2 03 PM 1970
DISPATCHED

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: *[Signature]*

ORIGINAL (SEE COPY)

CLASSIFICATION

[Handwritten signature]

DISPATCHED

COMMUNICATIONS SECTION

COMMUNICATIONS SECTION

DATE: MARCH 10 1970

MAR 10 5 07 PM 1970
COMMUNICATIONS

TO: DIRECTOR

FROM: SAC, NEW YORK

CLASSIFICATION

NOT TO BE RECLASSIFIED

INTERNAL SECURITY

INVESTIGATION

RECORDS

MARCH 10

RE: [Illegible]

CLASSIFICATION

COMMUNICATIONS SECTION

TO: DIRECTOR
FROM: SAC, NEW YORK

CLASSIFICATION

DATE

MARCH 10 1970

ORIGINAL FILE

COMMUNICATIONS SECTION

COMMUNICATIONS SECTION

COMMUNICATIONS SECTION

COMMUNICATIONS SECTION

[Handwritten mark]

61864

March 11, 1970

Mr. E. L. Quartey
Volta River Authority
P.O. Box M 77
Accra, Ghana

Dear Mr. Quartey:

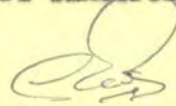
Re: Loan 618-GH
Volta Expansion Project

This letter confirms today's cable re award XA-6 contract as follows:

"RECEIVED EVALUATION CONTRACT XA-6 HOISTS AND TRASHRACKS MARCH TEN STOP BANK HAS NO OBJECTION TO AWARD AS PROPOSED BY YOUR CONSULTANTS TO NEWTON CHAMBERS ENGINEERING LTD FOR POUND STERLING 48689.50 OR POUND STERLING 51471.91 INCLUDING ERECTION SERVICES AND POSSIBLE ESCALATION"

We are sending a copy of the above cable and this letter to your Consultants, Henry J. Kaiser Company.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

pin EAMinnig:dd
IBRD/IDA

cc: Henry J. Kaiser Company
Messrs. Bennett (Controllers)
Nissenbaum (W. Africa)
Wyatt
Raizen
Central Files
Department Files

March 11, 1970

Mr. J. K. Taylor
Manager
Washington Office
Henry J. Kaiser Company
900 17th Street, N.W.
Washington, D.C. 20006

Dear Mr. Taylor:

Re: Loan 618-GH
Volta River Authority
Volta Expansion Project

Thank you for your letter of March 5, 1970 which we received on March 10, 1970 in reference to the Evaluation Report of bids for Contract XA-6, Supply of Intake Gate Hoists and Trashracks.

Please find enclosed for your information copies of today's cable and letter to the Volta River Authority.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Enclosures

pin
EAMinnig:dd
IBRD/IDA

cc: Messrs. Wyatt
Raizen
Central Files
Department Files (GH-0-46)

618614
John Minnig

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

March 5, 1970

Date Rec'd. Mar 10/70

Date Ack'd. March 11, 70

Assigned to Dyatt

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

CHA-0-46

Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo
Expansion.

Doc No 1

Please find enclosed two copies of Contract No. XA-6, Recommen-
dation for Award.

Sincerely yours,

Jesse K. Taylor / K.W.
Jesse K. Taylor
Manager, Washington Office

kw

Encl.

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

COMMUNICATIONS SECTION

RECEIVED
MAR 9 1970

COMMUNICATIONS SECTION

RECEIVED
MAR 9 1970

COMMUNICATIONS SECTION

COMMUNICATIONS SECTION

RECEIVED
MAR 9 1970

RECEIVED
1970 MAR -9 AM 11:54
COMMUNICATIONS SECTION

March 4, 1970

Mr. J. K. Taylor
Manager
Washington Office
Henry J. Kaiser Company
900 17th Street, N.W.
Washington, D.C. 20006

Dear Mr. Taylor:

Re: Loan 618-GH
Volta River Authority (VRA)
Akosombo Expansion Project

Thank you for your letter of February 24, 1970 with which you sent us additional information on Contract No. XA-4, Turbines, awarded to Hitachi.

We note that an analysis of the Generator bid, Contract XA-5 has shown that the shaft alignment would be awarded to the Canadian General Electric Company (CGE) and not to Hitachi, since the CGE bid was more favorable. Thus the Contract value for the XA-4 Contract would remain at Yen 711,213,000 or Yen 768,813,000 if estimated erection services and escalation are taken into account.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Jim
EAMinnig:dd
IBRD/IDA

cc: Messrs. Bennett (Controllers)
Nissenbaum (W. Africa)
Wyatt
Raizen
Memon
Central Files
Department Files (GHA-0-40)

Mr. Minnig
61864

HENRY J. KAISER COMPANY

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

February 24, 1970

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

Date Rec'd. *Feb 26/70*

Date Ack'd. *March 4/70*

Assigned to *Wyatt*

CHA 0-40

Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo Expansion.

Attached is additional information on Contract No. XA-4, Recommendation for Award, two copies.

This is also to confirm the delivery in person of two copies of Recommendation for Award, Contract No. XA-4 on Friday, February 20.

Sincerely yours,

Jesse K Taylor

Jesse K. Taylor
Manager, Washington Office

Encl.

JKT:kw

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

RECEIVED
FEB 28 1970

Mr. J. Edgar Hoover

Director, Federal Bureau of Investigation

Enclosed for you are two copies of a letterhead memorandum dated and captioned as above. The original of this memorandum is being furnished to the Department of Justice for their information.

Very truly yours,

Walter S. Gandy, Chief of Staff

Enclosed for you are two copies of a letterhead memorandum dated and captioned as above. The original of this memorandum is being furnished to the Department of Justice for their information.

Very truly yours,

Walter S. Gandy

Walter S. Gandy

1001
1000

1001
1000

RECEIVED

1970 FEB 26 AM 9:47

COMMUNICATIONS SECTION

KAISER ENGINEERS INTERNATIONAL, INC.

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604 · CABLE KAISENGS

February 19, 1970

VRA/070/608

Volta River Authority
P. O. Box M 77
Accra, Ghana

Attention: Mr. E. L. Quartey

Subject: Akosombo Expansion Project
Contract No. XA-4, Hydraulic Turbines and Governors
Recommendation for Award
1.242

Gentlemen:

Further to our "Recommendation for Award, Supply of Turbines and Governors" and companion letter, we submit herewith the following additional information and recommendation for your consideration:

1. General

As noted in the above referenced companion letter, the Bid opening date for Contract No. XA-5 was postponed one week to February 16, 1970 and as a result we could not fully evaluate certain turbine factors that are directly related to the generator. One Bid was received on February 16, namely, The Canadian General Electric Company. We have now had an opportunity to inspect the Bid received and are now in a position to clarify the relevant matters.

2. Combined Turbine/Generator Shop Shaft Alignment

We recommend the shop shaft alignment be awarded to the Contract No. XA-5 Supplier on the basis of the lowest acceptable bidder conforming to the Specifications. The Amount of Award for supply of turbines and governors will therefore remain as stated in our Letter No. VRA/070/596 as ₦ 711,213,000 (N¢ 2,029,439.46). The cost of performing this portion of the Work under Contract No. XA-5 will be included in the Amount of Award for that Contract.

A. Quotation for Shop Shaft Alignment:

- 1) by Hitachi under Contract No. XA-4 = N¢ 24,825.36
 - 2) by CGE under Contract No. XA-5 = N¢ 22,604.23
- Difference = N¢ 2,221.13

B. Estimated Cost of Shipping (Hitachi City/Peterborough)

- 1) Two turbine shafts @ 212,000 Lbs.
(Hitachi City, Japan/Peterborough, Ont.) = N¢ 7,865.86
 - 2) Two generator shafts @ 190,000 Lbs.
(Peterborough, Ont./Hitachi City, Japan) = N¢ 7,049.56
- Difference = N¢ 816.30
- Total difference in favor of CGE = N¢ 1,404.83

It is also considered that shipping time will be conserved by accepting the recommendation for shaft alignment as the general direction of the shipment of the shafts to be delivered for alignment is toward Ghana and not away from Ghana.

3. Shaft Size (Diameter)

Both Hitachi and CGE are proposing to use 46-inch diameter shafts. As a result there will be no difficulty in matching the couplings.

4. Shaft Lengths

While we had considered that some advantages could be realized (in convenience and possibly financial) by raising the elevation of the coupling faces (now set at El. 57.0 ft.) one or two feet, we note that CGE did not offer a unit price for differential of shaft length (Bid Item 1.04) and we have therefore concluded to abandon our considerations in this respect.

5. Thrust Bearing Capacity

We have noted the rating of generator thrust bearing given by CGE in their Bid for Contract No. XA-5. The aggregate loads required to be carried do not exceed the rating of the bearing.

- A. Rating of Bearing (Part 2, Sect. C, Item A-21) = 2,077,000 Lbs.
- B. Loads
 - 1) Wt. of Gen. Rotating Parts = 912,000 Lbs.
 - 2) Wt. of Turb. Rotating Parts = 271,000 Lbs.
 - 3) Maximum Hydraulic Thrust = 894,000 Lbs.

Total Load = 2,077,000 Lbs.

We trust the above satisfactorily evaluates the pertinent turbine factors that are related to the generator. We believe award of the shop' shaft alignment to the Contract No. XA-5 Supplier will result in a Contract in the best interest of the Authority. While we neglected to provide for segregating the shipping of the two combined shafts from Peterborough, Ontario to Tema in the Bid, we are now communicating with the Canadian General Electric Company in Peterborough to determine the amount allowed for this feature in their quoted price for Bid Item 1.03.

Very truly yours,

KAISER ENGINEERS INTERNATIONAL, INC.

Esauensen

for R. A. Lowell
Project Manager - Akosombo Expansion

ES/mb

cc: J. K. Taylor (2) for transmission to IBRD ✓
(1) for file

bc: Earl G. Peacock
L. H. Winters
H. B. Andresen

February 20, 1970

Mr. E. L. Quartey
Chief Executive
Volta River Authority
P.O. Box M.77
Accra, Ghana

Dear Mr. Quartey:

Re: Loan 618-GH
Volta Expansion Project

Thank you for your cable dated February 2, 1970. On February 18, 1970 we received the "Bid Evaluation Report on Contract XA-4, Turbines" prepared by your consultants Kaiser Engineers International Inc.

This letter confirms the cable sent to you yesterday as follows:

"EVALUATION REPORT CONTRACT XA-4 TURBINES RECEIVED FEBRUARY EIGHTEEN STOP NO OBJECTION TO AWARD TO HITACHI FOR CONTRACT VALUE YEN 768813000 INCLUDING ESTIMATED ERECTION SERVICES AND ESTIMATED ESCALATION AS RECOMMENDED BY YOUR CONSULTANTS"

The value of the Contract awarded to Hitachi Ltd., Tokyo, Japan for the two turbines tendered for would be:

	<u>Yen</u>	
Turbines & Governors	711,213,000	plus
Estimated Erection Services	21,600,000	plus
Estimated Escalation	<u>36,000,000</u>	
 TOTAL	 <u>768,813,000</u>	

The Contract should give a breakdown of foreign and local currency expenditure for erection services. The local currency expenditure would not be eligible for disbursement under Loan 618-GH.

We understand that after analysis of the Generator bid, Contract XA-5, the XA-4 Contract value may be increased by Yen 8,700,000 for combined shop shaft alignment thus increasing the Turbine and Governor Contract value excluding

Mr. E. L. Quartey

- 2 -

February 20, 1970

erection and escalation from Yen 711,213,000 to Yen 719,913,000 or total estimated costs including erection services and escalation to Yen 777,513,000.

A copy of this letter and the cable are being sent to Kaiser Engineers International Inc.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Min
EAMinnig:dd
IBRD/IDA

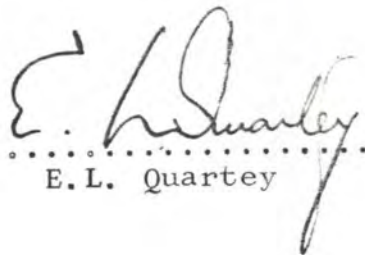
cc: Messrs. Nissenbaum (W. Africa)
Bennett (Controllers)
Wyatt
Raizen
Central Files
Department Files (GHA-O-22)

Feb 19, 1970

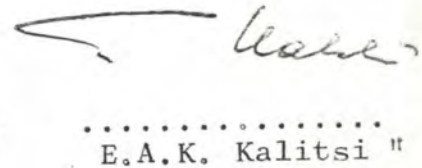
I CERTIFY that the following Resolution was duly passed by the Volta River Authority on the 17th February, 1970 in compliance with Section 5.04 of the General Conditions Applicable to Loan and Guarantee Agreements with the International Bank for Reconstruction and Development.

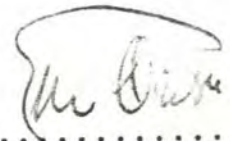
"RESOLUTION 52

That any of the following persons namely Mr. E.L. Quartey, Chief Executive, Dr. E.A. Sackey, Engineering Adviser, and Mr. E.A.K. Kalitsi, Director of Finance, whose specimen signatures are appended below be and is hereby the person authorised by the Volta River Authority to sign applications for withdrawals from the Loan Account under Loan No. GH 618 made to the Authority by the Bank under the Loan Agreement dated 23rd June, 1969.


.....
E.L. Quartey


.....
Dr. E.A. Sackey


.....
E.A.K. Kalitsi "


.....
SECRETARY
VOLTA RIVER AUTHORITY

19th February 1970.

6186H

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: FEBRUARY 19, 1970

CLASS OF
SERVICE: LT

COUNTRY: GHANA

Wn.

TEXT: EVALUATION REPORT CONTRACT XA-4 TURBINES RECEIVED FEBRUARY EIGHTEEN STOP
Cable No.: NO OBJECTION TO AWARD TO HITACHI FOR CONTRACT VALUE YEN 768813000 INCLUDING
ESTIMATED ERECTION SERVICES AND ESTIMATED ESCALATION AS RECOMMENDED BY YOUR
CONSULTANTS REGARDS

WYATT
INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME Gavin E. Wyatt

DEPT. Public Utilities Projects

SIGNATURE *G. Wyatt*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:

cc: Messrs. Nissenbaum (W. Africa)
Bennett (Controllers)
Wyatt
Raizen
Central Files
Department Files (GHA-0-22)
Kaiser Engineers International
Inc. (Washington Office)

Min
EAMinnig:dd
IBRD

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: *2*

COMMUNICATIONS
FEB 13 1970
DISPATCHED

ORIGINAL (BY COPY)

DISPATCHED

REPRODUCTION OF INFORMATION AUTHORIZED TO RELEASE

SYMBOLS

DATE

NAME

REPRODUCED BY

WRITE LETTERS PROJECT

Feb 19 6 16 PM 1970

COMMUNICATIONS

STATE R. 10322

FILED

TO: (MAYOR) (MAYOR OFFICE)
MAYOR, BIRMINGHAM, ALABAMA
DEPARTMENT OF PUBLIC AFFAIRS (MAY-0-55)
CIVIL RIGHTS
MAYOR
MAYOR
MAYOR (MAYOR OFFICE)
cc: MAYOR, BIRMINGHAM (MAYOR OFFICE)
STEVENS AND CO. DISTRIBUTION

NOT TO BE REPRODUCED

REPRODUCED
MAYOR

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DATE
1970

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PROJECT

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MAYOR

DATE: FEBRUARY 19, 1970

COMMUNICATIONS PROJECT

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6186H

Wyatt
M. Manning

I N C O M I N G C A B L E

DATE AND TIME

OF CABLE: FEBRUARY 19, 1970 1610

LOG NO.: RC 20 / 20

TO: WYATT INTBAFRAD

FROM: ACCRA

R O U T I N G

ACTION COPY: PU - POWERII

INFORMATION COPY: PUBLIC UTILITIES PROJECTS

DECODED BY:

TEXT:

RE GH618. KAISER ENGINEERS HAVE CONFIRMED AWARE RECOMMENDATIONS
RELATING CONTRACT XA-4 COPIED TO YOU AS PER OUR INSTRUCTIONS.
KAISER RECOMMENDATION ACCEPTABLE TO US. PENDING ARRANGEMENTS FOR CONTRACT
SIGNATURE, WE SEEK WORLD BANK CONCURRENCE TO ISSUE LETTER OF INTENT
TO HITACHI ON BASIS KAISER RECOMMENDATIONS TO ENABLE MANUFACTURE
START IMMEDIATELY. PLEASE CABLE REPLY.

QUARTEY

Already replied by our cable dated Feb 19, 1970/lin.

JAO

COMMUNICATIONS
FEB 20 9 38 AM 1970

6186H
Ghana
Tom Wyatt
Chas. Murray

INCOMING CABLE

DATE AND TIME
OF CABLE:

FEBRUARY 19, 1970, 1610 *Feb 20/70*

LOG NO.:

RC 20 / 20

Date Ack'd. _____

TO:

WYATT INTBAFRAD

Assigned to *Wyatt*

FROM:

ACCRA

ROUTING	
ACTION COPY:	PU - POWERII
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

GH-0-33

RE GH618. KAISER ENGINEERS HAVE CONFIRMED AWARE RECOMMENDATIONS
 RELATING CONTRACT XA-4 COPIED TO YOU AS PER OUR INSTRUCTIONS.
 KAISER RECOMMENDATION ACCEPTABLE TO US. PENDING ARRANGEMENTS FOR CONTRACT
 SIGNATURE, WE SEEK WORLD BANK CONCURRENCE TO ISSUE LETTER OF INTENT
 TO HITACHI ON BASIS KAISER RECOMMENDATIONS TO ENABLE MANUFACTURE
 START IMMEDIATELY. PLEASE CABLE REPLY.

QUARTEY

*Already taken care of
our cable 2/19/70 JAO*

JAO

COMMUNICATIONS
FEB 20 8 38 AM 1970
17520

File

ROUTING SLIP			Date FEB 23 1970	
INCOMING MAIL				
	Agric. Projects	A514		Off. Services Div.
	Mr. Bart	A700		Mr. Paijmans A735
	Mr. Burney	C522		Personnel Div. D1002
	Mr. Consolo	D1117		Mr. Pollan C915
	Controller's			Population Proj. B408
	Mr. de la Renaudiere	C719		Mr. Povey C711
	Development Serv.			Mr. Powell C911
	Director, Projects			Pub. Util. Proj. A343
	E. D. I.			Mr. Ram C708
	Educ. Projects	A637		Mr. Reamy D731
	Mr. Eschenberg	D1102		Mr. Reitter C708
	Mr. Frost	C813		Mr. D. Richardson B709
	Mr. Garcia Rayneri	C1011		Mr. Roulet D1104
	Mr. Gibbs	C616		Secretary's
	Mr. Glaessner	C815		Mr. Sekse C1224
	Mr. Gue	C714		Mr. Skillings A849
	Mr. Gustafson	C919		Mr. Southall C1203
	Mr. Halbe	B1012		Special Proj. B401
	Mr. Hartwich	B704		Mr. Springuel A718
	Mr. Hornstein	C508		Staff Relations
	Mr. Horsley	B714		Statistics Div.
	Mr. Husain	A538		Mr. Tolbert C622
	Industrial Proj.			Mr. Tolley C519
	Info. & Pub. Affairs	D900		Tourism Proj. D625
	Internal Auditor	A236		Trans. Projects A418
	Mr. Jentgen	C608		Travel Office C201
	Mr. Kirk	A622		Treasurer's
	Mr. Kraske	A611		Mr. Van Wagenen D1114
	Mr. Kruithof	C613		Mr. Wiehen B608
	Legal Dept.			Mr. Wilkinson C719
	Mr. Michaels	D1111		Mr. Wyss C822
	Mr. Mirski	C922		Mr. Zinman C809
	Mr. Mirza	C807		
	Mr. Nelson	C802		
Remarks				
From: Communications Section, Room C219, Extension 2023				

618614



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Phone 64941

Our Ref. 501/001/1293

Your Ref.

Date. February 17, 1970

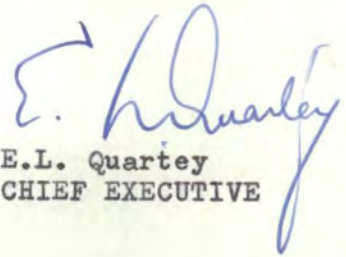
International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington, D.C. 20433,
U. S. A.

Dear Sirs,

We thank you for your letter of the 26th ultimo and very much regret the delay in submitting the Authority's progress report for the third quarter of 1969.

The report has now been completed and a copy is being mailed to you under separate cover.

Yours faithfully,


E.L. Quartey
CHIEF EXECUTIVE

RECEIVED

FEB 23 1970

VOLTA

VOLTA RIVER AUTHORITY



P.O. BOX 127
ACCRA, GHANA

General Volta Area

Page 1000

On 1st Feb 1970

Dear Sir

Reference is made to your letter of 27th January 1970 regarding the proposed report for the first quarter of 1970. The report has been prepared and is being submitted to the Board for their consideration. It is expected that the report will be ready for submission to you by the end of this month.

The report will be submitted to you as soon as it has been approved by the Board. It will contain details of the work done during the quarter and a summary of the progress made towards the completion of the programme of work for 1970.

The report will be submitted to you as soon as it has been approved by the Board. It will contain details of the work done during the quarter and a summary of the progress made towards the completion of the programme of work for 1970.

Yours faithfully,
General Manager

RECEIVED

1970 FEB 23 PM 12:08

COMMUNICATIONS SECTION

HENRY J. KAISER COMPANY

KAISER CENTER • 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

February 11, 1970

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

Date Rec'd. Feb 13/70

Date Ack'd. No reply req.

Assigned to Wyatt

GAAO-28

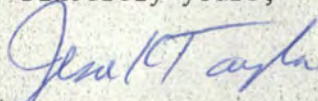
Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo Expansion.

Enclosed are as follows :

<u>Addendum No.</u>	<u>Title</u>
3	XA-5, Supply of Generators, Transformers and Major Electrical Equipment
2	XA-3E Power Plant, Installation of Electrical Equipment
3	XS-2, Installation of Substation Equipment and Transmission Line

Sincerely yours,



Jesse K. Taylor
Henry J. Kaiser Co.

Encl.

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

COMMUNICATIONS
10 FEB 15 1970

RECEIVED

'70 FEB 12 AM 10:48

COMMUNICATIONS SECTION

Faded header text, possibly containing date and time information.

Main body of faded text, likely containing the primary message or report content.

Second section of faded text, possibly a signature block or a specific report segment.

Third section of faded text, possibly a footer or a concluding statement.

Faded text at the bottom of the page, possibly a reference or a note.

THE VOLTA RIVER AUTHORITY
AKOSOMBO EXPANSION

SUPPLY OF GENERATORS, TRANSFORMERS
AND
MAJOR ELECTRICAL EQUIPMENT

ADDENDUM NO. 3

RETURN TO
CENTRAL FILES

Records & Communications Div.
Enclosed with letter
Dated FEB. 11, 1970
From HENRY J. KAISER CO.

2 February 1970

ADDENDUM NO. 3

The following addendum is issued under the provisions of clause IB-4 of the Instructions to Bidders pertaining to the above contract.

Part 1

1. On Page 1-1, clause IB-1 in the second line delete the date, "February 9," (modified from the original bid opening date of January 19, 1970 by Addendum No. 1) and substitute the date, "February 16,".

THE VOLTA RIVER AUTHORITY
AKOSOMBO EXPANSION

POWER PLANT
INSTALLATION OF ELECTRICAL EQUIPMENT

ADDENDUM NO. 2

2 FEBRUARY 1970

KAISER ENGINEERS INTERNATIONAL, INC.
OAKLAND, CALIFORNIA

ADDENDUM NO. 2

The following addendum is issued under the provisions of clause IB-4 of the Instructions to Bidders pertaining to the above Contract.

Part 2

1. On Page 2-6, Bid Item 1.37 delete the quantity, "800" and substitute the quantity, "2100".
2. On Page 2-6, Bid Item 1.40 delete the quantity, "300" and substitute the quantity, "400".
3. On Page 2-6, Bid Item 1.43 delete the quantity, "3000" and substitute the quantity, "2000".
4. On Page 2-6, Bid Item 1.44 delete the quantity, "2000" and substitute the quantity, "3500".

THE VOLTA RIVER AUTHORITY
AKOSOMBO EXPANSION

INSTALLATION OF SUBSTATION EQUIPMENT
AND
TRANSMISSION LINE

ADDENDUM NO. 3

2 FEBRUARY 1970

KAISER ENGINEERS INTERNATIONAL, INC.
OAKLAND, CALIFORNIA

ADDENDUM NO. 3

The following addendum is issued under the provisions of clause IB-4 of the Instructions to Bidders pertaining to the above Contract.

Part 2

1. On Page 2-5, Bid Item 6.06 delete the quantity, "200" and substitute the quantity, "900".
2. On Page 2-6, Bid Item 6.22 delete the quantity, "2000" and substitute the quantity, "4000".

61864

HENRY J. KAISER COMPANY

Mr. Minnig
Central Files

KAISER CENTER • 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604

February 9, 1970

Date Rec'd. *Feb 12/70*

Date Ack'd. *No answer yet*

Assigned to *H. Syatt*

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

GHA-0-26

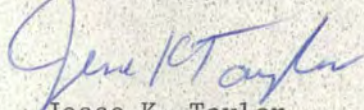
Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo Expansion.

Enclosed are as follows :

<u>Addendum No.</u>	<u>Contract Title</u>
1	XA-3M, Power Plant, Installation of Mechanical Equipment
1	XA-3E, " " , " " Electrical "
2	XS-2, Installation of Substation Equipment and Transmission Line

Sincerely yours,



Jesse K. Taylor
Henry J. Kaiser Co.

Encl.

JKT:kw

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

206.111.1111

RECEIVED

'70 FEB 11 AM 8:34

COMMUNICATIONS
SECTION

TO: [Faint text]
FROM: [Faint text]
SUBJECT: [Faint text]

[Faint text]

[Faint text]

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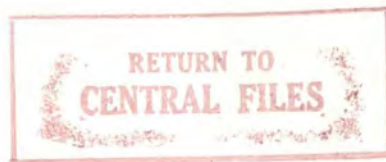
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[Faint text]

THE VOLTA RIVER AUTHORITY
AKOSOMBO EXPANSION

POWER PLANT
INSTALLATION OF MECHANICAL EQUIPMENT

ADDENDUM NO. 1



19 JANUARY 1970

KAISER ENGINEERS INTERNATIONAL, INC.

OAKLAND, CALIFORNIA

ADDENDUM NO. 1

The following addendum is issued under the provisions of clause IB-4 of the Instructions to Bidders pertaining to the above Contract.

Part 2

1. In Bid Item No. 1.1 on Page 2-4 delete the quantity, "200" and substitute the quantity, "600".
2. In Bid Item No. 2.7 on Page 2-5 delete the quantity "1000" and substitute the quantity, "3500".

Part 4

1. In sub-clause GC-17B on Page 4a-9 in the sixth, ninth and twelfth lines delete the word, "Authority" and substitute the word, "Engineer".
2. In sub-clause GC-17C on Pages 4a-9 and 4a-10 in the fourth, tenth and twelfth lines delete the word, "Authority" and substitute the word, "Engineer".
3. In sub-clause GC-27C on Page 4a-13 in the third line delete the word, "Authority" and substitute the word "Engineer".
4. In sub-clause GC-43B on Page 4a-22 in the fourth line delete the words, "fifteen (15)" and substitute the words, "thirty (30)".
5. In sub-clause 6-05D on Page 4c-6-2 after the first sentence add the following sentence: "The door shall fit the 8'-0" x 8'-8" high opening already provided in the machine shop wall."

THE VOLTA RIVER AUTHORITY
AKOSOMBO EXPANSION

POWER PLANT

INSTALLATION OF ELECTRICAL EQUIPMENT

ADDENDUM NO. 1

20 JANUARY 1970
KAISER ENGINEERS INTERNATIONAL, INC.
OAKLAND, CALIFORNIA

ADDENDUM NO. 1

The following addendum is issued under the provisions of clause IB-4 of the Instructions to Bidders pertaining to the above Contract.

Part 1

1. On Page 1-1, clause IB-2, following the address for Kaiser Engineers International add,

"High Commissioner of Ghana (in Canada)
The Sandringham
85 Range Road, Suite 810
Ottawa 2, Ontario, Canada"

Part 4

1. In sub-clause GC-17B on Page 4a-9 in the sixth, ninth and twelfth lines delete the word, "Authority" and substitute the word, "Engineer".
2. In sub-clause GC-17C on Pages 4a-9 and 4a-10 in the fourth, tenth and twelfth lines delete the word, "Authority" and substitute the word, "Engineer".
3. In sub-clause GC-27C on Page 4a-13 in the third line delete the word, "Authority" and substitute the word "Engineer".
4. In sub-clause GC-43B on Page 4a-22 in the fourth line delete the words, "fifteen (15)" and substitute the words, "thirty (30)".

THE VOLTA RIVER AUTHORITY
AKOSOMBO EXPANSION

INSTALLATION OF SUBSTATION EQUIPMENT
AND
TRANSMISSION LINE

ADDENDUM NO. 2

20 JANUARY 1970
KAISER ENGINEERS INTERNATIONAL, INC.
OAKLAND, CALIFORNIA

ADDENDUM NO. 2

The following addendum is issued under the provisions of the Instructions to Bidders pertaining to the above Contract.

Part 4

1. In sub-clause GC-43B on Page 4a-22 in the fourth line delete the words, "fifteen (15)" and substitute the words, "thirty (30)".

61864

Central Files
[Signature]

I N C O M I N G C A B L E

DATE AND TIME
OF CABLE:

FEBRUARY 2, 1970

1605

LOG NO.:

RC 39/2

TO:

WYATT INTBAFRAD

FROM:

ACCRA

R O U T I N G

ACTION COPY:

PU - POWER II

INFORMATION
COPY:

PUBLIC UTILITIES PROJECTS

DECODED BY:

TEXT:

RE GH618 OUR CONSULTANTS ADVISE ANALYSIS BIDS XA-4 SHOWS HITACHI
ALTERNATE BID FOR FIRM PRICE JAPANESE YEN SEVEN HUNDRED AND FIFTY
EIGHT POINT SEVEN MILLION WILL BE RECOMMENDED LESS DEDUCTIONS FOR
MODEL TESTS AND TURBINE GOVERNOR SPARE PARTS AND WRENCHES. WE
WILLING ACCEPT RECOMMENDATION AND SEEK YOUR APPROVAL FOR VRA
ACCEPTANCE OF ALTERNATE BID WITH FIRM PRICE. WE HAVE ASKED KAISER
TO SEND YOU DIRECTLY COPY FORMAL RECOMMENDATION AND WOULD REQUEST
YOUR EARLY APPROVAL ON STRENGTH OF KAISER COPY

QUARTEY VOLTA

MPB

SECTION
COMMUNICATIONS
FEB 5 1 54 PM 1970
FILED

Control No. JHA-0-22

TYPED

FEB 2 1 24 PM 1970

COMMUNICATIONS SECTION

WED

CIVILIAN AGENCY

FROM: [Illegible]

TO: [Illegible]

RE: [Illegible]

[Illegible text describing the communication details]

TEXT

FROM: [Illegible]

TO: [Illegible]

RE: [Illegible]

[Illegible text]

DECLASSIFIED BY:	[Illegible]
DATE:	[Illegible]
AUTHORITY:	[Illegible]
REASON:	[Illegible]

RECORDING UNIT

[Handwritten signatures and notes]

618617

Ghana
M. Wyatt
M. Manning

INCOMING CABLE

DATE AND TIME OF CABLE: FEBRUARY 2, 1970

1605

LOG NO.: RC 39/2

TO: WYATT INTBAFRAD

FROM: ACCRA

ROUTING	
ACTION COPY:	FU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

RE GH618 OUR CONSULTANTS ADVISE ANALYSIS BIDS XA-4 SHOWS HITACHI ALTERNATE BID FOR FIRM PRICE JAPANESE YEN SEVEN HUNDRED AND FIFTY EIGHT POINT SEVEN MILLION WILL BE RECOMMENDED LESS DEDUCTIONS FOR MODEL TESTS AND TURBINE GOVERNOR SPARE PARTS AND WRENCHES. WE WILLING ACCEPT RECOMMENDATION AND SEEK YOUR APPROVAL FOR VRA ACCEPTANCE OF ALTERNATE BID WITH FIRM PRICE. WE HAVE ASKED KAISER TO SEND YOU DIRECTLY COPY FORMAL RECOMMENDATION AND WOULD REQUEST YOUR EARLY APPROVAL ON STRENGTH OF KAISER COPY

QUARTEY VOLTA

Date Rec'd. Feb 2/70
 Date Ack'd. Feb 19/70 cable
 Feb 20/70 extra
 Assigne to Wyatt

GHA-0-22

MPB

REGION
COMMUNICATIONS
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LAD 5

TYPED

FEB 2 1 24 PM 1970

COMMUNICATIONS SECTION

REC

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100-100-100
100-100-100

STANDARD AGENT

Handwritten notes:
100-100-100
100-100-100
100-100-100

TO: DIRECTOR, FBI
FROM: SAC, [illegible]
SUBJECT: [illegible]

REC

TO: DIRECTOR, FBI
FROM: SAC, [illegible]
SUBJECT: [illegible]

SEARCHED	INDEXED
SERIALIZED	FILED
FEB 2 1970	
FBI - [illegible]	

STANDARD AGENT

Handwritten signature:
[illegible]

61864

January 26, 1970

Volta River Authority
P.O. Box M 77
Accra, Ghana

Re: Loan 618-GH

Gentlemen:

We wish to bring to your attention that we have not received the quarterly progress report for the period ended September 30, 1969.

We would appreciate receiving this report at your earliest convenience.

Thanking you for your kind attention to this matter,

Very truly yours,



Gavin Wyatt
Chief, Power Division II
Public Utilities Projects Department

af
IBRD

6186H

January 23, 1970

Mr. J. K. Taylor
Manager
Washington Office
Kaiser Engineers
900 17th Street, N.W.
Suite 1000
Washington, D.C. 20006

Dear Mr. Taylor:

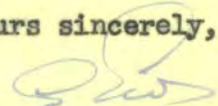
Re: Loan 618-GH
Volta River Authority (VRA)
Akosombo Expansion
Tender Documents

Thank you for your letter of January 19, 1970 with which you sent us copies of the following:

Addendum

- 1 XA-4 Supply of Turbines & Governors;
- 2 XA-5 Supply of Generators, Transformers, & Major Electrical Equipment;
- 1 XA-6 Supply of Intake Gate Hoists & Trashracks;
- 1 XS-1 Supply of Substation Equipment; and
- 1 XS-2 Installation of Substation Equipment & Transmission Line.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

hm
EAMinnig:dd
IBRD

cc: Messrs. Wyatt
Reitter (W. Africa)
Nissenbaum (W. Africa)
Raizen
Memon
Central Files
Department Files (GHA-0-15)

61864

January 21, 1970

Dean R. Edstrom, Esq.
Davis Polk & Wardwell
1 Chase Manhattan Plaza
New York, N. Y. 10005

Re: 618 GH (Volta Expansion Project)

Dear Dean:

Many thanks for your letter of December 30, 1969. The draft index looks fine. My only comment is that, on p. 3, the IBRD sent two cables, one each to the Government and the Authority, regarding satisfaction of the conditions precedent.

Best regards.

Sincerely,

Thomas M. Clyde
Attorney

Tmc.
TM Clyde:ep

2786H
61861

OUTGOING WIRE

TO: VOLTA
ACCRA

DATE: January 21, 1970

CLASS OF
SERVICE: NLT

COUNTRY: GHANA

Wn

TEXT:
Cable No.:

FOR QUARTEY REURLET DECEMBER 31 BANK HAS NO OBJECTION IN PRINCIPLE
TO AMENDMENT OF SECTION THREE TWO OF VOLTA RIVER DEVELOPMENT ACT TO
ELIMINATE REQUIREMENT THAT HEAD OF STATE OR HEAD OF GOVERNMENT BE
VRA CHAIRMAN STOP FORMAL CONSENT OF BANK MUST AWAIT RECEIPT OF
ACTUAL WORDING OF THE PROPOSED AMENDMENT REGARDS

CHEEK
INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME Bruce M. Cheek

DEPT. Western Africa

IMClyde/prc

SIGNATURE *B. M. Cheek*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:

Messrs. Clyde
Raizen
Minning

For Use By General Files and Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: _____

318647
cc 61864

OUTGOING WIRE

TO: MENSAH
MINFINECPAN

DATE: January 21, 1970

ACCRA

CLASS OF SERVICE: NLT

COUNTRY: GHANA

TEXT:
Cable No.:

RE YOUR LETTER JANUARY 15 (STOP) WE HAVE GABLED QUARTEY AS
FOLLOWS TODAY QUOTE FOR QUARTEY REURLET DECEMBER 31 BANK HAS
NO OBJECTION IN PRINCIPLE TO AMENDMENT OF SECTION THREE TWO OF
VOLTA RIVER DEVELOPMENT ACT TO ELIMINATE REQUIREMENT THAT HEAD
OF STATE OR HEAD OF GOVERNMENT BE VRA CHAIRMAN STOP FORMAL
CONSENT OF BANK MUST AWAIT RECEIPT OF ACTUAL WORDING OF THE
PROPOSED AMENDMENT UNQUOTE REGARDS

REITTER
INTBAFRAD

NOT TO BE TRANSMITTED

MESSAGE AUTHORIZED BY:

NAME Peter Reitter

DEPT. Western Africa

PR Reitter/prc

SIGNATURE *Peter Reitter*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

CLEARANCES AND COPY DISTRIBUTION:

Messrs. Clyde
Raizen
Minning

For Use By General Files and Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: _____

GH-618

but Minnig
↑

KAISER ENGINEERS

DIVISION OF KAISER INDUSTRIES CORPORATION

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604 · CABLE KAISENGS

January 19, 1970

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H St. N. W.
Washington D. C. 20433

Date Rec'd. *Jan 20/70*
Date Ack'd. *Jan 23/70*
Assigned to *Wyatt*

Dear Mr. Minnig:

Reference is made to your letter of January 12, 1970 and our previous discussions. Enclosed are copies as follows :

GH-0-15

Dist#

Addendum No.

Contract Title

- ✓ 1 XA-4, Supply of Turbines and Governors
- ✓ 2 XA-5, Supply of Generators, Transformers and Major Electrical Equipment
- ✓ 1 XA-6, Supply of Intake Gate Hoists and Trashracks
- ✓ 1 XS-1, Supply of Substation Equipment
- ✓ 1 XS-2, Installation of Substation Equipment and Transmission Line

Sincerely yours,

Jesse K Taylor

Jesse K. Taylor
Manager, Washington Office
Kaiser Engineers

Encl.

JKT:kw

900 17th St. N. W.
Suite 1000
Washington D. C. 20006

KAISER ENGINEERS

ENGINEERING · CONSTRUCTION · CONTRACTING SINCE 1914

RECEIVED

JAN 20 10 58 AM 1970

GENERAL FILES
COMMUNICATIONS



IN CASE OF REPLY THE
NUMBER AND DATE OF THIS
LETTER SHOULD BE QUOTED.

OUR REF. NO. _____
YOUR REF. NO. _____



3106H
✓ CC 6/8/6H
PERMANENT MISSION OF GHANA
TO THE UNITED NATIONS
144 EAST 44TH STREET
NEW YORK, N.Y. 10017
MURRAY HILL 2-1635

15th January, 1970.

Dear Sirs,


PROPOSED AMENDMENT TO THE
VOLTA RIVER DEVELOPMENT ACT, 1961

I refer to the letter on the above mentioned subject dated 31st December, 1969 and addressed to you by the Chief Executive of the Volta River Authority. My Government is anxious to have the proposed amendment passed by the present sitting of the National Assembly which will end in the middle of March. This will enable us to re-constitute the Board, the term of office of the present membership having mostly expired since August, 1969.

I should therefore be very grateful for your earliest reply to the above mentioned letter taking into account the time period that would be required for Parliamentary action to be completed. Please send a copy of your reply directly to me at the following address:

Mr. J.H. Mensah,
Minister of Finance and Economic Planning,
P.O.Box M.40,
Accra,
Ghana.

Yours faithfully,


J.H. MENSAB
MINISTER OF FINANCE AND
ECONOMIC PLANNING

THE PRESIDENT ✓
I.B.R.D.

THE ADMINISTRATOR,
A.I.D.

CHAIRMAN OF THE BOARD,
VOLTA ALUMINIUM CO. LTD.

January 12, 1970

Mr. J. K. Taylor
Manager
Washington Office
Kaiser Engineers
900 17th Street, N.W.
Suite 1000
Washington, D.C. 20006

Dear Mr. Taylor:

Re: Loan 618-GH
Volta River Authority (VRA)
Akosombo Expansion

Thank you for your letter of December 30, 1969 with which you sent in the final tender documents for Contracts XA-6, XS-1, XA-3M (Vol. I and II), and XS-2 as well as documents XA-5 and XA-3E reviewed by the Canadian International Development Agency.

We trust that the question of escalation has now been resolved in accordance with our discussions and we hope that a copy of the addendum issued covering this point will be sent to us in due course.

Yours sincerely,



Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

Wm
EAMinnig:dd
IBRD

cc: Messrs. Wyatt
Reitter (Area, W. Africa)
Nissenbaum (Area, W. Africa)
Raizen
Memon
Central Files ✓
Department Files (GH-O-1)

61864

OUTGOING WIRE

TO: QUARTEY
VOLTA
ACCRA

DATE: DECEMBER 31, 1969

CLASS OF LT
SERVICE:

Wh'

COUNTRY: GHANA

TEXT: REURCAB 29 DECEMBER RE BID DOCUMENT XA-4 WE ARE DISCUSSING PROBLEM WITH
Cable No.: KAISER AND EXPECT AGREEMENT ON REVISED WORDING TO BE SENT BIDDERS BY
JANUARY FIVE WILL ADVISE FURTHER

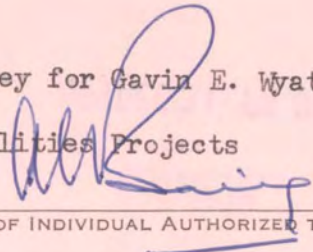
WYATT
INTBAFRAD

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME A. E. Bailey for Gavin E. Wyatt

DEPT. Public Utilities Projects

SIGNATURE 
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

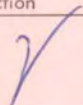
CLEARANCES AND COPY DISTRIBUTION:

cc: Central Files
Dept. Files (Control No. GH-9-136)
Mr. Wyatt
AA Mr. Minnig
AA Raizen: jc
IBRD

For Use By Communications Section

ORIGINAL (File Copy)

(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: 

ORIGINAL (BY COPY)

RECEIVED
GENERAL FILES
IBSD

1969 DEC 31 PM 4:12

RECEIVED
GENERAL FILES
1969 DEC 31 PM 3:39

DEPT. FILES (COMPL. NO. CH-2-130)
CC: COMPL. FILES
SERVICES AND COST DISTRIBUTION

NOT TO BE TRANSMITTED

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61864



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA
Phone 64941

P O BOX 177,
ACCRA, GHANA

Our Ref. 248/13
Your Ref.

Date. 31st Dec., 1969.

International Bank for Reconstruction
and Development,
1818 H Street, N.W.,
Washington 25, D.C.

Dear Sirs:

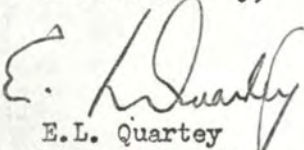
PROPOSED AMENDMENT TO THE VOLTA RIVER DEVELOPMENT ACT, 1961

We refer to Section 3(2) of the Volta River Development Act, 1961 (Act 46) of Ghana, which provides that the President of Ghana shall be ex officio the Chairman of the Volta River Authority.

The present Government of Ghana considers it inappropriate that the Head of Government or the Head of State must be ex officio the Chairman of any public corporation and that, therefore, it is intended to amend the above-mentioned section to make it possible for the President (or Presidential Commission) acting on the advice of the Prime Minister to appoint as Chairman of the Authority a person other than the Head of Government or Head of State.

The exact wording of the proposed amendment has not yet been furnished to the Authority, and as soon as this is available to us, we shall communicate it to you.

Meanwhile, we shall be grateful if you would indicate your consent to the proposal to amend the Act in the manner outlined above.

Yours faithfully,

E.L. Quartey
CHIEF EXECUTIVE

Original to: Mr Rame
Date: 11/70
Communications
Section

6H-618

KAISER ENGINEERS

DIVISION OF KAISER INDUSTRIES CORPORATION

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604 · CABLE KAISENGS

December 30, 1969

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
Public Utilities Projects Department
1818 H. St. N. W.
Washington D. C. 20433

Date Rec'd. Jan. 6/70

Date Ack'd. Jan 12/70

Assigned to Wyatt

Ed Minnig
↑

6H-0-1

Dear Mr. Minnig:

Reference is made to our previous correspondence on Akosombo Expansion.

Enclosed are final copies of contract documents for XA-6, XS-1, XA-3M (Vol. I & II), and XS-2.

Also enclosed for your information are copies of XA-5 and XA-3E reviewed by C.I.D.A.

Sincerely yours,
Jesse K Taylor
Jesse K. Taylor
Manager, Washington Office
Kaiser Engineers

Encl.

JKT:kw

900 17th St. N. W.
Suite 1000 Washington D. C. 20006

KAISER ENGINEERS

RECEIVED

JAN 5 11 51 AM 1970

GENERAL FILES
COMMUNICATIONS

TO: SAC, [illegible]

FROM: [illegible]

RE: [illegible]

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[illegible]

61864

INCOMING CABLE

DATE AND TIME OF CABLE: DECEMBER 29, 1969 1627

LOG NO.: RC 24/29

TO: WYATT INTBAFRAD

FROM: ACCRA

ROUTING	
ACTION COPY:	PU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

RE LOAN 618-GH VOLTA EXPANSION PROJECT BID DOCUMENT XA-4
 REVISED EDITIONS SC-15 PAGE 4B-14 RE ESCALATION, NOT ACCEPT-
 ABLE TO HITACHI. KAISER REQUEST REVERTING TO ORIGINAL XA-4
 WORDING. VRA AGREE WITH WORDING AS PROPOSED IN YOUR LETTER
 OF OCTOBER 29TH. PLEASE CONTACT KAISER TO WORK OUT DIFFICULTY
 AND ADVISE

QUARTEY VOLTA ACCRA

MPB

TO: DIRECTOR, FBI (100-371100)
FROM: SAC, NEW YORK (100-100000)
SUBJECT: [Illegible]

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[Illegible typed text]

COMMUNICATIONS
DEC 29 1 10 PM 1969

TYPED

61864

Ghana
Wyatt
Central Files

INCOMING CABLE

DATE AND TIME OF CABLE: **DECEMBER 29, 1969** **1627**
LOG NO.: **RC 24/29**
TO: **WYATT INTBAFRAD**
FROM: **ACCRA**

ROUTING	
ACTION COPY:	PU - POWER II
INFORMATION COPY:	PUBLIC UTILITIES PROJECTS
DECODED BY:	

TEXT:

RE LOAN 618-GH VOLTA EXPANSION PROJECT BID DOCUMENT XA-4
REVISED EDITIONS SC-15 PAGE 4B-14 RE ESCALATION, NOT ACCEPT-
ABLE TO HITACHI. KAISER REQUEST REVERTING TO ORIGINAL XA-4
WORDING. VRA AGREE WITH WORDING AS PROPOSED IN YOUR LETTER
OF OCTOBER 29TH. PLEASE CONTACT KAISER TO WORK OUT DIFFICULTY
AND ADVISE

QUARTEY VOLTA ACCRA

Date Rec'd. Dec 30/69
Date Ack'd. Dec 31/69
Assigned to Wyatt

GH-9-136

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Dec 29 1 20 PM 1969

TYPED

61864-(Togo/Dahomey REGIONAL POWER)

KAISER ENGINEERS

DIVISION OF KAISER INDUSTRIES CORPORATION

KAISER CENTER • 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604 • CABLE KAISENGS

December 22, 1969

Mr. Edward A. Minnig
International Bank for Reconstruction
and Development
1818 H St. N.W.
Washington D. C. 20433

See Minnig
↑

Date Rec'd. Dec. 23/69
Date Ack'd. Noted
Assigned to Wyatt

GH-9-135

Dear Mr. Minnig,

Please find enclosed a copy of Contract XA-4, Akosombo
Expansion, Supply of Turbines and Governors.

Sincerely yours,

Jesse K Taylor

Jesse K. Taylor
Manager, Washington Office
Kaiser Engineers

Encl

JKT:kw

900 17th St. N.W.
Suite 1000
Washington D. C. 20006

DEC 23 10 52 AM 1969

KAISER ENGINEERS

RECEIVED

DEC 23 10 25 AM 1969

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COMMUNICATIONS

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11/11/69

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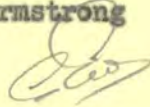
11/11/69

11/11/69

61864

Mr. Walter J. Armstrong

December 10, 1969

Gavin E. Wyatt 

GHANA - Comments on Nathan Sector Studies
Mr. N. M. Kamrany's memo of Nov. 5 to Files

The statement contained in paragraph 27 of Mr. Kamrany's memo of December 1 to files is incorrect.

Paragraph 3.08 of our Grey Cover report on the extension of Volta River Project (Report No. PU-8a of May 8, 1969) reads as follows:

"The completed power plant at Akosombo is expected to meet market requirements until 1977. At that time VALCO may exercise a final option, install a fifth pot-line and increase its demand from 295 MW to 370 MW. To meet this increase and also the increase from the normal growth of ECG and other consumers, VRA will have to provide additional capacity. Various potential hydro developments on the Volta, Pra and Tano Rivers have been investigated in various degrees of detail in the past and are listed in Annex 9 with their capacities, energy generation and estimated costs."

In fact there are eleven hydro projects listed in the Annex 9 referred to, ranging in size from 26 MW to 260 MW. In view of the probable difficulty of getting agreement between Ghana and Nigeria for an exchange of power over the Dahomey/Togo lines, it is probable that one of the larger projects will be started about 1973. A Bank loan of \$12.5 million towards the cost of the Kpong project is shown in FY 1973 in the current 5-year plan, but this is notional, and intended merely to indicate that Ghana has need for financing of a major hydro-electric project in that year, and we expect them to ask us for financial assistance.

GEWyatt:lp
IBRD

cc: Mr. Minnig
Mr. Memon
Central Files
Department Files

61864



VOLTA RIVER AUTHORITY

Cables VOLTA, ACCRA

P. O. BOX M77,
ACCRA, GHANA

Our Ref. P/1622/8738

Phone 64941

Your Ref.

Date December 9, 1969.

RECEIVED

International Bank for
Reconstruction & Development,
1818 H. Street N.W.,
Washington D.C. 20433,
U.S.A.

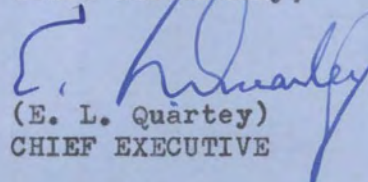
Attention: Mr. R.A. Honstein.

Dear Sir,

RESUMPTION OF DUTY

I have pleasure to advise that I have returned to
Ghana from my overseas trip and resumed duty on Monday,
December 8, 1969.

Yours faithfully,


(E. L. Quartey)
CHIEF EXECUTIVE

RECEIVED

DEC 16 8 32 AM 1969

GENERAL FILES
COMMUNICATIONS

VOLTA RIVER
AUTHORITY
P.O. BOX 177,
ACCRA, GHANA PAR AVION
IC POWER FOR LETTER
S DEVELOPMENT AEROGamme

BY AIR MAIL



INTERNATIONAL BANK FOR RECONSTRUCTION

AND DEVELOPMENT,

1818 H. STREET N.W.,

WASHINGTON D.C. 20433,

U.S.A.

↑ First fold here ↓

← Second fold here →

Senders name and address :

AN AIR LETTER SHOULD NOT CONTAIN ANY ENCLOSURE
IF IT DOES IT WILL BE SURCHARGED
OR SENT BY ORDINARY MAIL.

Form approved by the Postmaster General, No. 91A

AIR LINE
AEROGAMES

December 1, 1969

Mr. J. R. Heller, III
Wilmer, Cutler & Pickering
Farragut Building
900 17th Street, N. W.
Washington, D. C. 20006

Re: Loan No. 618 GH (Volta
Expansion Project)

Dear Rod:

Many thanks for your letter of November 28, 1969 enclosing the copies of the agreements signed in connection with the financing of the Valco expansion.

I noticed that the amendment to the 1962 Exim-Valco Loan Agreement was missing from the stack, but I have found an execution booklet in our files and will use that.

Thanks for arranging for our bound volumes.

Best regards.

Sincerely,

TMC.

Thomas M. Clyde
Attorney

TMC/bt

CENTRAL FILESRECORD OF DOCUMENT

Date Received: 2/17/71

TITLE OF DOCUMENT:

DATED: November, 1969

AKOSOMBO EXPANSION -

POWER PLANT - INSTALLATION OF MECHANICAL
EQUIPMENT (Vol. I of II)

SUPPLY OF TURBINES AND GOVERNORS

SUPPLY OF INTAKE GATE HOISTS AND
TRASH RACKS

SH-618 SH

CENTRAL FILES

RECORD OF DOCUMENT

Date Received: 3-8-71

TITLE OF DOCUMENT:

DATED: Nov., 1969

URA - Asombo Exp.
Supply of Equipment for Volta
and
Smelter Substations

31064

✓cc 618614

Mr. J. Burke Knapp

November 18, 1969

Bruce M. Check

BMC

Visit of Mr. E. L. Quartey

Mr. E. L. Quartey, Chief Executive of the Volta River Authority (VRA) in Ghana is meeting you today at 4:00 p.m. Mr. Quartey is well known to the Bank. We do not know of any particular matter he might take up with you. As far as we are aware, this is more in the nature of a courtesy call.

The Bank has made two loans to VRA. The first one was made in 1962 in an amount of US\$ 47 million for the construction of Volta Dam and the second loan of US\$ 6 million in March 1969 for expansion of VRA. As you know, the construction of the dam was completed well ahead of schedule and well within estimated costs. Contracts for the expansion have been let out and work is in progress.

There is only one major issue concerning the power sector in Ghana which could come up for discussion in the coming months. During the negotiations for the power expansion loan in March 1969, the Government of Ghana and VRA were receptive to the Bank's suggestion that it would be conducive to efficiency and economy if the two organizations in the power sector, i.e. VRA and Electricity Corporation of Ghana (ECG) were merged. The feeling then was, though, this may be desirable, it would be more appropriate to consider this merger by the time expansion works now in progress at VRA and ECG are about to be completed. We do not know what view the new civilian government in Ghana would take on this matter. The Bank would be pursuing this question sometime later after the new civilian government settles down.

82

WCL:jb

618 GH

November 12, 1969

Ronald F. Sullivan, Esq.
Thelen, Marrin, Johnson
and Bridges
111 Sutter Street
San Francisco, California 94104

Re: Loan No. 618 GH
(Volta Expansion Project)

Dear Mr. Sullivan:

At Rod Heller's request I am enclosing copies of the "Canadian Loan Arrangements" referred to in the World Bank's Loan Agreement with VRA. I gather these will be included in the bound volume. Incidentally, I am sure the CIDA would appreciate a copy of the bound volume for their records.

I am also enclosing copies of the Agreements and letters signed between the World Bank and the Ghanaians for the second Loan and of the cables dated October 1, 1969 declaring the Loan effective.

Sincerely yours,

Thomas M. Clyde
Attorney

Enc.

cc: Mr. Heller

TMC
TMClyde/ep

CONTRACT FILES
6186H

KAISER ENGINEERS INTERNATIONAL, INC.

KAISER CENTER · 300 LAKESIDE DRIVE, OAKLAND, CALIFORNIA 94604 · CABLE KAISENGS

November 6, 1969

Mr. Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department
1818 H Street, N. W.
Washington, D. C. 20433

Date Rec'd. Nov 10/69
Date Ack'd. NONE rec'd Jim
Assigned to Wyatt

Subject: Loan 618-GH
Volta River Authority (VRA)
Akosombo Expansion Project
Notice of Intent to Invite Tenders
1.240

*has been
o/r*
[Signature] ETHA 9-120

Dear Mr. Wyatt:

Many thanks for your letter dated October 23, 1969, containing two comments on the draft Notices of Intent to Invite Tenders. Our response is as follows:

1. We agree that the January 2nd date can no longer be met. This date was suggested to the VRA in our letter dated September 9, 1969, which transmitted the draft announcements to them. At that time it was believed to be a reasonable date. January 19, 1970 has now been set as the date for the XA-4 bids. ✓
2. We brought requirements you mention to the VRA's attention in the same September 9th letter, in which we quoted from the bank's "Guidelines for Procurement" and also from the Canadian International Development Agency publication "Purchasing Procedures". ✓

Very truly yours,

[Signature: R. A. Lowell]

R. A. Lowell
Project Manager

RAL om

cc - Volta River Authority w/attachment
J. K. Taylor w/attachment

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1969 NOV 10 PM 12:07



INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

1818 H Street, N.W., Washington, D. C. 20433, U.S.A.

Area Code 202 • Telephone - EXecutive 3-6360 • Cable Address - INTBAPRAD

October 23, 1969

RECEIVED

OCT 28 1969

R. A. LOWELL

*Noted
28
Oct 28, 1969*

Mr. R. A. Lowell
Project Manager
Kaiser Engineers International, Inc.
Kaiser Center
300 Lakeside Drive
Oakland
California 94604

Dear Mr. Lowell:

Re: Loan 618-GH
Volta River Authority (VRA)
Akosombo Expansion Project
Notice of Intent to Invite Tenders

Thank you for your letter of October 14, 1969 with which you sent us revised draft Notices of Intent to Invite Tenders. To these invitations we have two comments. They are:

1. Bid Opening Date Contract No. KA-4 Turbines, January 2, 1970.

Allowing the time needed for publication and requests by prospective manufacturers including transmittal time of documents, we consider that the bid opening date proposed would not give manufacturers sufficient time to prepare a tender. We therefore suggest that the proposed bid opening date be reconsidered and extended at least to January 15, 1970.

2. In addition to the publications in the International Press we draw your attention to the Bank's requirements that invitations to bid be transmitted to local official representatives of all appropriate countries of the Bank and Switzerland and advertised in at least one newspaper of general circulation in Ghana. In countries where some of the Bank's members who are potential suppliers have no official representation, invitations to bid should be sent promptly to the Foreign Offices of such countries. We would therefore appreciate it if you would notify VRA of this requirement and make the necessary arrangements for such notification to be made as early as possible but no later than the proposed publication in the International Press.

Sincerely yours,

Gavin E. Wyatt
Chief, Power Division II
Public Utilities Projects Department

61864

Form No. 27
(6-69)

INTERNATIONAL DEVELOPMENT
ASSOCIATION

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

INTERNATIONAL FINANCE
CORPORATION

OUTGOING WIRE

TO: SACKY

DATE: NOVEMBER 3, 1969

VOLTA
ACCRA

CLASS OF
SERVICE: NL

COUNTRY: GHANA

Per

TEXT:
Cable No.:

REURCAB OCTOBER 31 TENDER XA-3M RECEIVED FROM KEII OCTOBER 15 COMMENTS
TO YOU OCTOBER 29 WITH COPY TO KEII STOP WITH EXCEPTION COMMENTS ON
TENDER XA-4 COMMA COPIES OUR COMMENTS ON XS-2 COMMA XA-3M COMMA XA-6
COMMA AND XS-1 COMMA SENT TO KEII

WYATT

INTBAFRAD

cc: Kaiser Engineers
Washington Office

NOT TO BE TRANSMITTED

AUTHORIZED BY:

NAME for Gavin E. Wyatt

DEPT. Public Utilities Projects Dept. Power Div. II

SIGNATURE *James J. Fisk*
(SIGNATURE OF INDIVIDUAL AUTHORIZED TO APPROVE)

EAMinnig:vta
IBRD

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Mr. Raizen, Mr. Wyatt
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(IMPORTANT: See Secretaries Guide for preparing form)

Checked for Dispatch: *[Signature]*

