

CONFORMED COPY

CREDIT NUMBER 4213-GH

Financing Agreement

(Second Phase of the Coastal Transmission Backbone Project)

between

REPUBLIC OF GHANA

and

INTERNATIONAL DEVELOPMENT ASSOCIATION

Dated December 4, 2007

CREDIT NUMBER 4213-GH

FINANCING AGREEMENT

AGREEMENT dated December 4, 2007, between REPUBLIC OF GHANA (“Recipient”) and INTERNATIONAL DEVELOPMENT ASSOCIATION (“Association”). The Recipient and the Association hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) constitute an integral part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in the Financing Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II — FINANCING

- 2.01. The Association agrees to extend to the Recipient, on the terms and conditions set forth or referred to in this Agreement, a credit in an amount equivalent to thirty million eight hundred thousand Special Drawing Rights (SDR 30,800,000) (“Financing”) to assist in financing the project described in Schedule 1 to this Agreement (“Project”).
- 2.02. The Recipient may withdraw the proceeds of the Financing in accordance with Section IV of Schedule 2 to this Agreement.
- 2.03. The Maximum Commitment Charge Rate payable by the Recipient on the Unwithdrawn Financing Balance shall be one-half of one percent (1/2 of 1%) per annum.
- 2.04. The Service Charge payable by the Recipient on the Withdrawn Credit Balance shall be equal to three-fourths of one percent (3/4 of 1%) per annum.
- 2.05. The Payment Dates are March 15 and September 15 in each year.
- 2.06. The principal amount of the Financing shall be repaid in accordance with repayment schedule set forth in Schedule 3 to this Agreement.

2.07. The Payment Currency is Dollar.

ARTICLE III — PROJECT

3.01. The Recipient declares its commitment to the objectives of the Project and the Program. To this end, the Recipient shall cause the Project and the Program to be carried out by the Project Implementing Entity in accordance with the provisions of Article IV of the General Conditions.

3.02. Without limitation upon the provisions of Section 3.01 of this Agreement, and except as the Recipient and the Association shall otherwise agree, the Recipient shall ensure that the Project is carried out in accordance with the provisions of Schedule 2 to this Agreement.

ARTICLE IV — REMEDIES OF THE ASSOCIATION

4.01. The Additional Events of Suspension consist of the following:

- (a) The Project Implementing Entity's Legislation has been amended, suspended, abrogated, repealed or waived so as to affect materially and adversely the ability of the Project Implementing Entity to perform any of its obligations under the Project Agreement; and
- (b) A situation has arisen which shall make it improbable that the Program, or a significant part thereof, will be carried out.

4.02. The Additional Events of Acceleration consist of any event specified in Section 4.01 of this Agreement.

ARTICLE V — EFFECTIVENESS; TERMINATION

5.01. The Additional Conditions of Effectiveness consist of the following

- (a) the Subsidiary Loan Agreement has been executed on behalf of the Recipient and the Project Implementing Entity; and
- (b) The Project Implementing Entity and the WAPP Organization have executed a memorandum of understanding providing for the implementation of the WAPP Action Plan.

- 5.02. The Additional Legal Matter is that the Subsidiary Loan Agreement has been duly authorized or ratified by the Recipient and the Project Implementing Entity and is legally binding upon the Recipient and the Project Implementing Entity in accordance with its terms.
- 5.03. The Effectiveness Deadline is the date ninety (90) days after the date of this Agreement.

ARTICLE VI — REPRESENTATIVE; ADDRESSES

- 6.01. The Recipient's Representative is its Minister responsible for finance.
- 6.02. The Recipient's Address is:

Ministry of Finance and Economic Planning
P.O. Box MB40
Accra, Ghana

Cable:	Telex:	Facsimile:
ECONOMICON Accra	2205 MIFAEP GH `	233-21-667069 233-21-663854

- 6.03. The Association's Address is:

International Development Association
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Cable:	Telex:	Facsimile:
INDEVAS Washington, D.C.	248423 (MCI) or 64145 (MCI)	1-202-477-6391

AGREED at Accra, Republic of Ghana, as of the day and year first above written.

REPUBLIC OF GHANA

By: /s/ Kwadwo Baah-Wiredu
Authorized Representative

INTERNATIONAL DEVELOPMENT ASSOCIATION

By: /s/ Ishac Diwan
Authorized Representative

SCHEDULE 1

Project Description

The objective of the Project is to assist the Recipient in developing a more stable and reliable exchange of electricity among the national power systems of the WAPP “Zone A” Coastal States.

The Project constitutes the second phase of the Coastal Transmission Backbone Project in support of the Program, and consists of the following components:

Component 1: Transmission infrastructure development

- A. Upgrade of the Akosombo and Volta sub-stations through the supply and installation of: (i) a 330 kV power equipment at the Volta sub-station; (ii) a 161 kV power equipment at the Akosombo sub-station; (iii) control, relaying and metering systems; (iv) cabling systems, grounding, bus works and connections; and (v) steel structures.
- B. Construction of the third bulk supply point for the Accra/Tema load centers through the design, manufacture, testing, delivery and installation of a 161kV/33kV high voltage substation.
- C. Upgrade of the switchgear at the Kpong generation station through the design, manufacture, testing and erection of substation equipment.

Component 2: Upgrade of transmission control and communication systems

Upgrade of the supervisory control and data acquisition telecommunication systems and metering equipment of substations in the 161 kV transmission network within the Recipient’s territory.

Component 3: Upgrade of strategic power generation stations’ operation

- A. Development and implementation of an emergency preparedness plan for the Akosombo and Kpong generation stations.
- B. Rehabilitation of cranes and penstocks at the Akosombo generation station.

Component 4: Implementation of measures under the WAPP Action Plan

- A. Upgrade of the Project Implementing Entity's Akuse training center in support of the WAPP Organization through: (i) acquisition and deployment of a modular power system simulator; (ii) installation of a 330 kV transmission line training field; (iii) provision of capacity building support for the training center staff; (iv) development of specific training transfer modules; and (v) upgrading of the training center's learning materials and resources.

- B. (i) Preparation of a study on the options for transmission network development for the northern sector of the Recipient's territory to facilitate safe and reliable power transfers from coastal power generation plants into the Sahelian zone; (ii) preparation of environmental and social impact assessments, line route surveys and related engineering design and bid documentation for the construction of the Aboadze-Prestea-Kumasi and Tumu-Han-Wa transmission lines as part of the WAPP inter-zonal transmission hub; and (iii) preparation of a study on the options for the future development of a modern system control center in the Recipient's territory to accommodate the WAPP inter-zonal transmission hub.

SCHEDULE 2

Project Execution

Section I. Subsidiary Loan Agreement; Implementation Arrangements

A. Subsidiary Loan Agreement

1. To facilitate the carrying out of the Project by the Project Implementing Entity, the Recipient shall on-lend the proceeds of the Financing to the Project Implementing Entity under a subsidiary loan agreement between the Recipient and the Project Implementing Entity, under terms and conditions approved by the Association, which shall include the following (“Subsidiary Loan Agreement”):
 - (a) an interest rate on the on-lent amount equal to four and one half (4.5) percent per annum (fixed at par with the IBRD lending rate derived from Libor), and a repayment period of twenty (20) years including a grace period of five (5) years. The Project Implementing Entity shall bear the foreign exchange risk on the on-lent amount; and
 - (b) the Project Implementing Entity shall perform all of its obligations under the Project Agreement.
2. The Recipient shall exercise its rights under the Subsidiary Loan Agreement in such manner as to protect the interests of the Recipient and the Association and to accomplish the purposes of the Financing. Except as the Association shall otherwise agree, the Recipient shall not assign, amend, abrogate or waive the Subsidiary Loan Agreement or any of its provisions.

B. Implementation Arrangements

The Recipient shall ensure that the Project is carried out by the Project Implementing Entity in accordance with the provisions of this Agreement and the Project Agreement, and in accordance with the guidelines, procedures, recommendations, and other specifications set forth in the Project Implementation Manual and in the Environmental Management Plan and, except as the Association shall otherwise agree, shall not amend or waive or concur to be amended or waived any provision of the aforementioned documents, if such amendment or waiver shall, in the opinion of the Association, materially or adversely affect the implementation of the Project. The Recipient shall ensure that timely information on the status of implementation of the Environmental

Management Plan is included in the Project Reports prepared pursuant to Section II.A of this Schedule.

Section II. Project Monitoring, Reporting and Evaluation

A. Project Reports

1. (a) The Recipient shall ensure that the progress of the Project is monitored and evaluated and that Project Reports are prepared in accordance with the provisions of Section 4.08 of the General Conditions and on the basis of the indicators set forth below in sub-paragraph (b) of this paragraph. Each Project Report shall cover the period of one calendar quarter, and shall be furnished to the Association not later than forty five (45) days after the end of the period covered by such report.
- (b) The performance indicators referred to above in sub-paragraph (a) consist of the following:
 - (i) Quantity of electricity traded (import/export) between the WAPP “Zone A” Coastal States, disaggregated by power utility;
 - (ii) Level of power losses in the principal transmission networks of WAPP “Zone A” Coastal States, disaggregated by power utility;
 - (iii) Percentage of the peak power demand within the WAPP “Zone A” Coastal States met by economy power exchanges via the Coastal Transmission Backbone, disaggregated by power utility;
 - (iv) Quantity of electricity transferred between WAPP “Zone A” Coastal States, via the Coastal Transmission Backbone, disaggregated by power utility;
 - (v) Percentage reduction in the number and frequency of power outages in the WAPP “Zone A” Coastal States that are linked to malfunctions on the Coastal Transmission Backbone, disaggregated by power utility;
 - (vi) Percentage reduction in the detection/response time for power outages in WAPP “Zone A” Coastal States that are linked to malfunctions on the Coastal Transmission Backbone, disaggregated by power utility;

- (vii) Deployment of emergency preparedness plans for strategic hydropower generation stations in the WAPP “Zone A” Coastal States that are linked to the Coastal Transmission Backbone;
 - (viii) Collection, analysis and dissemination of power sector monitoring and evaluation data of the WAPP “Zone A” Coastal States; and
 - (ix) Implementation of a well functioning Operational Security and Mitigation Plan.
2. For purposes of Section 4.08 (c) of the General Conditions, the report on the execution of the Project and related plan required pursuant to that Section shall be furnished to the Association not later than six months before the Closing Date.
 3. On or about June 1, 2008, the Recipient shall undertake in conjunction with the Project Implementing Entity and the Association, a comprehensive midterm review of the Project during which it shall exchange views generally on all matters relating to the progress of the Project, and the performance by the Recipient and the Project Implementing Entity of their respective obligations under the Legal Agreements, having regard to the performance indicators referred to in paragraph 1 (b) of this Part A.

B. Financial Management, Financial Reports and Audits

1. The Recipient shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 4.09 of the General Conditions.
2. Without limitation on the provisions of Part A of this Section, the Recipient shall prepare and furnish or cause to be prepared and furnished to the Association not later than forty five (45) days after the end of each calendar six months, interim un-audited financial reports for the Project covering the calendar six months, in form and substance satisfactory to the Association.
3. The Recipient shall have its Financial Statements audited in accordance with the provisions of Section 4.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one fiscal year of the Recipient. The audited Financial Statements for each such period shall be furnished to the Association not later than six months after the end of such period.

Section III. Procurement

A. General

1. **Goods and Works.** All goods and works required for the Project and to be financed out of the proceeds of the Financing shall be procured in accordance with the requirements set forth or referred to in Section I of the Procurement Guidelines, and with the provisions of this Schedule.
2. **Consultants' Services.** All consultants' services required for the Project and to be financed out of the proceeds of the Financing shall be procured in accordance with the requirements set forth or referred to in Sections I and IV of the Consultant Guidelines, and with the provisions of this Schedule.
3. **Definitions.** The capitalized terms used below in this Section to describe particular procurement methods or methods of review by the Association of particular contracts, refer to the corresponding method described in the Procurement Guidelines, or Consultant Guidelines, as the case may be.

B. Particular Methods of Procurement of Goods and Works

1. **International Competitive Bidding.** Except as otherwise provided in paragraph 2 below, goods and works shall be procured under contracts awarded on the basis of International Competitive Bidding.
2. **National Competitive Bidding.** Goods and works may be procured under contracts awarded on the basis of National Competitive Bidding in the circumstances specified in the Procurement Plan.

C. Particular Methods of Procurement of Consultants' Services

1. **Quality- and Cost-based Selection.** Except as otherwise provided in paragraph 2 below, consultants' services shall be procured under contracts awarded on the basis of Quality and Cost-based Selection.
2. **Other Methods of Procurement of Consultants' Services.** The following methods of procurement, other than Quality and Cost-based Selection, may be used for consultants' services in the circumstances specified in the Procurement Plan: (a) Quality-based Selection; and (b) procedures set forth in paragraphs 5.2 and 5.3 of the Consultant Guidelines for the Selection of Individual Consultants.

D. Review by the Bank of Procurement Decisions

The Procurement Plan shall set forth those contracts which shall be subject to the Association's Prior Review. All other contracts shall be subject to Post Review by the Association.

Section IV. Withdrawal of the Proceeds of the Financing

A. General

1. The Recipient may withdraw the proceeds of the Financing in accordance with the provisions of this Section and such additional instructions as the Bank may specify by notice to the Recipient, to finance Eligible Expenditures as set forth in the table in paragraph 2 below.
2. The following table specifies the categories of Eligible Expenditures that may be financed out of the proceeds of the Financing ("Category"), the allocations of the amounts of the Financing to each Category, and the percentage of expenditures to be financed for Eligible Expenditures in each Category:

Category	Amount of the Financing Allocated (expressed in SDR)	Percentage of Expenditures to be Financed
(1) Works and Goods	26,450,000	100% of Foreign Expenditures and 90% of Local Expenditures
(2) Consultants' Services	3,750,000	90%
(3) Unallocated	600,000	
TOTAL AMOUNT	30,800,000	

B. Withdrawal Conditions; Withdrawal Period

1. Notwithstanding the provisions of Part A of this Section, no withdrawal shall be made for payments made prior to the date of this Agreement.

2. The Closing Date is December 31, 2010.

SCHEDULE 3

Repayment Schedule

Date Payment Due	Principal Amount of the Financing repayable (expressed as a percentage)*
On each March 15 and September 15:	
commencing September 15, 2016 to and including March 15, 2026	1
commencing September 15, 2026 to and including March 15, 2046	2

*The percentages represent the percentage of the principal amount of the Financing to be repaid, except as the Association may otherwise specify pursuant to Section 3.03 (b) of the General Conditions.

APPENDIX

Definitions

1. “Category” means a category set forth in the table in Section IV of Schedule 2 to this Agreement.
2. “Cedi” means the currency of the Recipient.
3. “Coastal Transmission Backbone” means the 330kV transmission lines to be established pursuant to Decision A/Dec.7/01/05 of the Authority of Heads of State and Government of ECOWAS that will extend from the Prestea sub-station (Ghana) to the Aboadze and Volta sub-stations (Ghana), the Mome Hagou sub-station (Togo), the Sakete sub-station (Benin), and terminate at the Ikeja West sub-station (Nigeria).
4. “Consultant Guidelines” means the “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” published by the Bank in May 2004.
5. “ECOWAS” means the Economic Community of West African States, whose member states are the Recipient, Benin Burkina Faso, Cape Verde, Cote d’Ivoire, Gambia, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.
6. “Environmental Management Plan” means the Project Implementing Entity’s plan dated February 2006, as the said plan may be amended and/or supplemented from time to time with the prior concurrence of the Association, giving details of measures appropriate or required to manage potential environmental risks and mitigate adverse impacts associated with the implementation of any construction, rehabilitation, installation and maintenance activities under the Project, together with adequate institutional, monitoring and reporting arrangements for ensuring proper implementation of, and regular feedback on compliance with, the Environmental Management Plan.
7. “General Conditions” means the “International Development Association General Conditions for Credits and Grants”, dated July 1, 2005.
8. “Operational Security and Mitigation Plan” means the WAPP Organization’s set of common rules for system protection, restoration and operation of the Coastal Transmission Backbone which will define and put in place specific procedures for concerned transmission system operators to: (i) allocate and monitor the

sharing of spinning reserves; (ii) coordinate load shedding, if necessary; (iii) determine maximum loading limits for interconnection lines and monitoring compliance to ensure safe and secure regional operations; (iv) establish operational criteria for generators connected to the regional network and for deployment of designated black start units for execution of network restoration plans under multiple scenarios; and (v) communicate during emergencies and/or reporting of events.

9. “Procurement Guidelines” means the “Guidelines for Procurement under IBRD Loans and IDA Credits” published by the Bank in May 2004.
10. “Procurement Plan” means the Project Implementing Entity’s procurement plan for the Project, dated June 1, 2006 and referred to in paragraph 1.16 of the Procurement Guidelines and paragraph 1.24 of the Consultant Guidelines, as the same shall be updated from time to time in accordance with the provisions of said paragraphs.
11. “Program” means the program designed to serve as the framework for policy reform, institutional development and investments in the energy sector as outlined in the ECOWAS Energy Protocol adopted pursuant to Decision A/Dec.17/01/03 of the Authority of Heads of State and Government of ECOWAS and ratified by the Recipient, and (ii) the ECOWAS Revised Master Plan for the Generation and Transmission of Electrical Energy adopted pursuant to Decision A/Dec.7/01/05 of the Authority of Heads of State and Government of ECOWAS.
12. “Project Implementation Manual” means the Project Implementing Entity’s manual, as the same may be modified from time to time with the approval of the Association, containing detailed arrangements and procedures for: (i) day-to-day implementation and institutional coordination of the Project; (ii) procurement arrangements and procedures; (iii) disbursement and financial management arrangements and procedures; (iv) arrangements and procedures for the implementation and monitoring of the Environmental Management Plan; (v) performance indicators, monitoring, reporting and evaluation; and (vi) such other administrative, accounting and financial procedures as shall be required for the Project.
13. “Project Implementing Entity” means the VRA as hereinafter defined.
14. “Project Implementing Entity’s Legislation” means the VRA Act of 1961, as amended to the date of this Agreement.

15. “Subsidiary Loan Agreement” means the agreement referred to in Section I.A of Schedule 2 to this Agreement.
16. “VRA” means the Volta River Authority, established and operating pursuant to the VRA Act of 1961.
17. “WAPP” means the West Africa Power Pool, a cooperative mechanism for pooling the operations of the national power systems of ECOWAS member states into a unified regional electricity market, established pursuant to Decision A/Dec.8/12/01 of the Authority of Heads of State and Government of the ECOWAS.
18. “WAPP Action Plan” means the action plan of the Project Implementing Entity specifying measures to be implemented under the Program in accordance with a memorandum of understanding between the Project Implementing Entity and the WAPP Organization.
19. “WAPP Organization” means the specialized institution of ECOWAS, established pursuant to Decision A/Dec.18/01/06 and Decision A/Dec.20/01/06 of the Authority of Heads of State and Government of the ECOWAS, whose mission is to promote technical cooperation and operational coordination among power utilities in ECOWAS member states
20. “WAPP “Zone A” Coastal States” means Côte d’Ivoire, Ghana, Togo, Benin and Nigeria.