Document of
The World Bank

Report No: 18580-IVC

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED IDA GUARANTEE

OF UP TO US$35 MILLION

OF A SYNDICATED COMMERCIAL BANK LOAN

TO CINERGY

FOR THE AZITO POWER PROJECT

IN THE

REPUBLIC OF CÔTE D'IVOIRE

November 17, 1998

CURRENCY EQUIVALENTS

(Exchange Rate as of August 3, 1998)

Local Currency Unit = CFAF
US$1.00 = 591 CFAF

FISCAL YEAR

January 1 - December 31

UNITS AND MEASURES

bcf	-	billion cubic feet
bpd	-	barrels per day
GWh	-	gigawatt-hour (= 1 million kWh)
kV	-	kilovolt
km	-	kilometer
mmbbl	-	million barrels
mmbtu	-	million British thermal units
mmcfd	-	million cubic feet per day
MW	-	megawatt (=1 million watts)
tcf	-	trillion cubic feet

ABBREVIATIONS AND ACRONYMS

ABB	Asea Brown Boveri Limited
ABB-EV	ABB Energy Ventures, B.V.
BNETD	Bureau National d'Etudes Techniques et de Développement
CA	Concession Agreement
CAA	Caisse Autonome d'Amortissement
CCEM	Contrat Clef En Main (Turn Key Contract) for the transmission line
CDC	Commonwealth Development Corporation
CIE	Compagnie Ivoirienne d'Electricité
CIPREL	Compagnie Ivoirienne de Production d'Electricité
EdF	Electricité de France
EECI	Energie Electrique de Côte d'Ivoire
EIA	Environmental Impact Assessment
EPC	Engineering, Procurement and Construction
CFAF	Franc de la Communauté Financière Africaine
FF	French Francs
FNEE	Fonds National de l'Energie Electrique
GORCI	Government of the Republic of Côte d'Ivoire
IFC	International Financial Corporation
IPP	Independent Power Producer
IPS-CI	Industrial Promotion Services (Côte d'Ivoire), S.A.
O&M	Operations and Maintenance
PRG	Partial Risk Guarantee
RAP	Resettlement Action Plan
RCI	Republic of Côte d'Ivoire
SIR	Société Ivoirienne de Raffinage
UMIC	United Meridien International Corporation

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Annexes

CÔTE D'IVOIRE
The Azito Power Project
Project Appraisal Document
Africa Regional Office

Date: November 9, 1998	Task Manager: Said R. Mikhail
Country Director: Shigeo Katsu	Sector Manager: Mark D. Tomlinson
Project ID: CI-PE-58547 Sector: Energy	Program Objective Category: Sector Investment
Lending Instrument: IDA Partial Risk Guarantee	Program of Targeted Intervention: No [X]

Project Financing Data [ ] Loan [ ] Credit [X] Guarantee [ ] Other [Specify]

The Project cost is estimated at US$223million (see Annex 3 for details). The financing plan is as follows:

	US $ Million	US $ Million
Equity		**43.90**
Senior Debt		
IFC A	32.30	
IFC B	30.20	
CDC & Others	47.80	
IDA Guarantee Facility	30.20[1]	
Debt Subtotal		**140.50**
Subordinated debt	20.07	
Cash from operations	18.47	
Subtotal		**38.53**
TOTAL		**222.93**

Responsible agencies: Ministry of Energy and Bureau National d'Etudes Techniques et de Développement (BNETD)

For Guarantees: [ ] Partial credit [X] Partial risk

Proposed coverage: The PRG would provide coverage for the Government of the Republic of Côte d'Ivoire's (GORCI) contractual non-compliance under the Concession Agreement and the Contract for the Construction of the Transmission Line (the Contrat Clef-en-Main (CCEM) Agreement).

Project sponsors: CINERGY, a special purpose company owned by (i) ABB Energy Ventures, B.V. (ABB-EV), a subsidiary of Asea Brown Boveri Limited (ABB); (ii) Electricité de France Internationale, a wholly-owned subsidiary of Electricite de France (EdF), the French national electricity utility; and (iii) Industrial Promotion Services (Côte d'Ivoire), S.A. (IPS-CI), a unit of the Aga Khan Fund for Economic Development.

Nature of underlying financing: A syndicated commercial loan, guaranteed by IDA.

Terms of financing:	Principal amount (US$)	up to US$35 million
	Final maturity	12 years
	Amortization profile	equal quarterly installments

Financing available without Guarantee?: [ ] Yes [X] No

If yes, estimated cost or maturity:

Estimated financing cost or maturity with Guarantee: 2.75 percent per annum (indicative)

Project implement. period: 09/1998 - 06/00 Expected effective. date: 12/98 Expected Fin. closing date: 12/98

[1] This is based on a preliminary financing plan which will be finalized at Financial Closure. The IDA guaranteed loan could be increased to US$35 million.

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IN THE REPUBLIC OF CÔTE D'IVOIRE

A: PROJECT DEVELOPMENT OBJECTIVE

Project development objective and key performance indicators (Annex 1):

1. The objective of the project is to provide power to meet expected demand growth and improve service delivery in Côte d'Ivoire at a competitive price. This objective is to be achieved through a private provider, CINERGY (owned by ABB and its partners, IPS and EdF International) which won the contract competitively to build, own, operate, for a term of 24 years, (BOOT scheme) a 300 MW gas-fired power plant. It is proposed that the project be supported by an IDA Partial Risk Guarantee which is critical to help secure financing for the associated transmission line. This is the first IDA Guarantee being proposed under the Pilot Program approved by the IDA Board in November 1997[2]. It was anticipated in the Board Paper that Côte d'Ivoire would be one of the countries in support of which IDA's Guarantee authority would be used. The project is being jointly undertaken with IFC which obtained its Board approval on June 15, 1998. This IFC/IDA collaboration is the preferred form of Bank Group intervention in the project, as a role for MIGA could not be accommodated by the Sponsors. ABB opted for political risk coverage under its company's global Political Insurance Policy. The project would be monitored through standard indicators for the power sector (plant availability and thermal efficiency), progress reports and annual audited statements of performance and finances.

B: STRATEGIC CONTEXT

Sector-related Country Assistance Strategy (CAS) goal supported by the project

2. CAS document number: 17007-IVC; discussed by the Board in August 1997. Poverty reduction through sustained growth and explicit pro-poor policies are the main goals of the Côte d'Ivoire country assistance strategy (CAS). Main objectives supported by the CAS, as they relate to the energy sector, are to: (i) expand and diversify exports as the main engine of growth, in agriculture, manufacturing, energy, mining and services; (ii) promote the private sector while continuing government disengagement from productive activities; (iii) strengthen Côte d'Ivoire as a regional hub; and (iv) improve energy service delivery to the rural and urban poor to reduce inequities. The CAS thus

[2] Board Paper on IDA Guarantees in IDA-Only Countries: Report No. IDA/R97-97, dated August 13, 1997

emphasizes the creation of the legal and regulatory environment to build confidence for private sector investment; to enhance human resource development; and to provide basic infrastructure. While the CAS objectives are ambitious, Côte d'Ivoire has enjoyed rates of GDP growth of 5 to 7 percent since devaluation of the CFAF in 1994 and must sustain or increase these if the country is to improve the lives of its citizens and reduce poverty. The country has succeeded in attracting private investment which increased from 4.3 percent of GDP in 1993 to 9.8 percent of GDP in 1997, causing the ratio of total investment to GDP to grow from 7.4 percent in 1993 to 16 percent in 1997. In parallel, the Government's privatization program, which got off to a slow start, has now gained momentum and includes not only banks and agro-industries but also utilities (telecommunications, power, water supply); public ownership declined from about 50 percent of assets to about 18 to 20 percent in 1997.

3. The central theme of the CAS in the energy and power sectors is to promote improved efficiency, better service and wider access. Private investment is seen as the main vehicle to achieve these goals. The CAS therefore focuses on establishing an enabling regulatory and legal environment and a responsive institutional framework to encourage private sector participation in oil, gas and power generation (reduced public investment in utilities creates the fiscal space for government to concentrate its investment in the social sectors). The Bank Group has focused on these goals since 1990 when the Energy Sector Adjustment Loan (Ln. 3150-IVC) was approved. One of the main achievements of that operation (in the electricity sub-sector) has been the award of a concession to manage the generation, transmission and distribution of power to *Compagnie Ivoirienne d'Electricité (CIE).* CIE has been successful in improving billing and collections, expanding the network (including rural electrification, which it manages for the state) and putting order into the sector's finances.

4. IFC has been involved in oil and gas projects which have opened the door to a clean source of fuel, natural gas. The plentiful supply of competitively priced gas has given Côte d'Ivoire the lowest cost electricity in the Region. This was an important factor in development of the first IPP in Sub-Saharan Africa, CIPREL in 1994/5. IFC was a shareholder and a lender for Phase I of the Project and IDA a lender for Phase II. The proposed Azito Project would be the second IPP in Côte d'Ivoire jointly undertaken with IFC, where IDA's role has evolved from lender to Guarantor.

5. In keeping with the Board Paper on IDA Guarantees, use of an IDA Guarantee to support this project is appropriate and consistent with Côte d'Ivoire being a HIPC country: the project should contribute to accelerated overall growth. IDA has relied primarily on IFC's appraisal of the project as detailed in IFC's Board Report dated June 15, 1998. IDA has focused its appraisal on the transmission component and on issues related to the proposed IDA Guarantee and the mitigation of risks thereunder.

Macro Economic Context

6. The Government of Côte d'Ivoire has exploited the competitiveness gains resulting from the January 1994 devaluation of the CFA Franc (CFAF) and of its economic reforms, supported by an IMF ESAF, several World Bank structural adjustment credits and funds from other multilateral institutions and from bilateral donors. Led by a strong rise in exports and investment, gross domestic product increased in real terms by 2.1 percent in 1994, 7.1 percent in 1995 and is estimated to have increased by 6.8 percent in 1996 and 6 percent in 1997. The volume of exports rose by an annual average rate of about 11 percent between 1994 and 1996. Private investment almost doubled between 1993 and 1996. Over the same period, public investment grew from 3.7 percent to 4.3 percent of GDP, causing the ratio of total investment to GDP to grow from 7.8 percent in 1993 to 13.9 percent in 1996. Inflation was successfully controlled after devaluation, falling from 32 percent in 1994 to 7.7 percent in 1995 and to 3.5 percent in 1996.

7. Public finances improved considerably. The ratio of government revenues to GDP increased from less than 18 percent to 22.5 percent, while that of primary expenditures to GDP fell from 21.3 percent to 19.4 percent. In particular, the wage bill declined from 10.7 percent of GDP to 7.1 percent. The Government has nearly eliminated its arrears to the private sector and has done away with external arrears. The government will continue to restructure spending, keeping the low share of public wages to GDP constant, and shifting spending in favor of recurrent and capital expenditures in primary health, primary education, and public infrastructure.

Medium-Term Macroeconomic Framework

8. The major objectives of the 1998-2000 Policy Framework Paper (PFP) distributed to the Board in March 1998 are to ensure financial viability, to stay on a path of sustained growth, to reduce poverty, and substantially to improve the living standards of the population. The private sector will remain the engine of growth and the coming phase of economic reform will focus on: (a) fiscal consolidation through broadening the tax base and restructuring government expenditure in favor of priority social sectors and basic infrastructure; (b) deepening structural reforms that promote private sector development and investment and thus build a sound basis for sustainable growth; and (c) pursuing an ambitious social agenda, especially in education and health and in the reduction of poverty. Particular emphasis will continue to be put on good governance, especially through more efficient use of public resources and the fight against fraud.

9. The principal macroeconomic objectives for 1998–2000 are to: (a) achieve real annual GDP growth of 6 percent; (b) limit inflation to about 3 percent; and (c) achieve a current account deficit of 2 percent by 2000. Investment is projected to rise from 13.9 percent of GDP in 1996 to 19.3 percent in 2000 with a strong recovery of savings, expected to increase from 22.3 percent of GDP in 1996 to 27.6 percent in 2000. This will be essential if the economic growth objective is to be achieved. Tight fiscal policy will be pursued to generate the savings needed to finance investment and service public debt. The

public sector will complete its withdrawal from directly productive activities; 13 public enterprises were fully privatized and 16 partially privatized during the 1994-1996 period. In 1997, nine additional enterprises were privatized with additional privatizations planned for 1998 through 2000.

External Debt Situation

10. The Net Present Value (NPV) of the stock of Ivorian public debt stood at US$13.0 billion at the end of 1997. Of this 22 percent was held by the multilaterals, including 11 percent by the World Bank, 6 percent by the African Development Bank and 3 percent by the IMF. Some 31 percent of the total was held by Paris Club members and 46 percent by London Club creditors.

11. *Paris Club.* Côte d'Ivoire has received significant debt relief from the Paris Club. Eligible debt to Paris Club creditors was rescheduled in March 1994 on London terms at a 67 percent NPV discount. A new Paris Club agreement on Lyon terms was signed on April 27, 1998, restructuring eligible debt at an 80 percent NPV discount. The 1998 agreement provides significant cash flow relief to Côte d'Ivoire during the HIPC interim period of 1998 through March 2001.

12. *Commercial Debt.* Côte d'Ivoire closed a commercial debt restructuring agreement on March 31, 1998 in which all outstanding commercial commitments were restructured at a 75 percent NPV discount. The amount restructured was US$6.8 billion, of which US$2.4 billion in principal and US$4.4 billion in interest, arrears and penalties. The Bank supported this agreement by providing a Commercial Debt Restructuring Program Credit of US$50 million and an IDA Debt Reduction Facility grant of US$35 million (Grant No. 2975-IVC, approved by the Board on July 10, 1997).

13. *Multilateral Debt.* Côte d'Ivoire faces major debt obligations in the medium-term even with commercial and official bilateral debt relief. Its ratio of debt service to government revenue, for example, is projected to remain above 27 percent from 1997 through 2000. Its ratio of the NPV of debt service to government revenue is projected to be 292.9 percent in 2000. Because of Cote d'Ivoire's external debt burden, the Executive Directors of IDA and the IMF agreed to make the country eligible for support under the HIPC Initiative based on the fiscal criterion. Specifically, on March 19, 1998, the Executive Directors endorsed:

- a decision point of March, 1998;
- an interim period of three years with a completion point of March, 2001; and
- IDA debt relief under the Initiative of US$91 million in NPV terms. This debt relief under the Initiative would be provided through approximately US$314 million in IDA grants tied to new adjustment operations.

14. *Debt Management.* The IMF and the World Bank have been in discussions with GORCI to strengthen the institutional capacity in Côte d'Ivoire to monitor and reduce external debt.

Projected Impact of the HIPC Debt Relief

15. Based on projections to the completion point of March 2001, including the value of a Paris Club flow operation in 1998 and a Paris Club stock of debt operation in 2001 on Naples terms, US$345.2 million in NPV debt relief is needed from bilateral and multilateral creditors. As previously noted, the contribution of IDA to this debt relief will be US$91 million in NPV terms. This represents 26.4 percent of total relief and 50.1 percent of multilateral assistance. IDA's contributions, and those of the other creditors, are expected to bring Côte d'Ivoire's external debt ratios to sustainable levels by the approved completion point of March 2001. At that time - after the effects of the commercial debt agreement of 1998 and the Paris Club flow rescheduling of 1998, and assuming a Paris Club stock of debt operation in 2001 - the share of the World Bank group in the NPV stock of public debt will be reduced to 11.7 percent.

Main Government Sector Strategy

16. The Government of Côte d'Ivoire has adopted a comprehensive sector policy for energy covering oil and gas, biomass and electricity. The Government's Letter of Power Sector Policy (dated June 1995), details its plans to restructure the industry and regulatory environment, as well as the institutional arrangements. IDA maintains an active dialogue in each of these areas and is working closely with Government and its advisors to introduce these sector reforms.

17. *Electricity sector structure.* The supply of power in Côte d'Ivoire has improved in recent years. The present operating capacity includes 470 MW of thermal plant and 620 MW of hydro plant. The transmission system comprises some 1,700 km of 225 kV lines and approximately 2,400 km of 90 kV lines; the country's power system has been interconnected with Ghana since 1984 (and through it, to Togo and Benin) while a link to Burkina Faso is now under construction; an extension to Mali is also envisaged. The distribution network consists of approximately 14,200 km of 33kV and 15kV lines and some 8,400 km of low tension lines. The system supplies over half a million customers, about two thirds of it in urban areas (many rural communities are still not linked to the national grid). Overall, about 60 percent of the population have access to electricity, the highest service ratio in Sub-Saharan Africa.

18. *Demand for electricity.* Since devaluation in 1994, the demand for electricity in Côte d'Ivoire has been growing annually at 12 percent, compared with a GDP growth averaging 6 percent. Demand growth is expected to remain strong. Presently the total demand for electricity is about 4,000 GWh. This is being met about 50 percent from hydro generation and 50 percent from thermal plants. Although present capacity is sufficient to meet demand for this year, additional capacity is needed to meet next year's

projected increase in demand. In addition, Côte d'Ivoire is aware that it urgently needs to augment its thermal capacity to attenuate the effect of variable hydrological conditions following repeated droughts.

19. *Key policies.* Government's policies are designed to provide improved power supply for residential, industrial and commercial users and wider access. The key policy objective is to meet strongly rising demand while maintaining quality service at reasonable cost. In view of this objective, and in line with the government's policy of encouraging private investment, the Government is seeking to attract private sector financing for all additional generating capacity. In addition, the government supports regional integration and, with other states in West Africa, is active in promoting further interconnection and eventually a West Africa Power Pool.

20. *Regulatory and Institutional Framework.* Dialogue with government is currently focused on unbundling CIE and putting in place modern regulation to protect consumers and ensure fairness and equity for operators. In the 1980s and early 1990s, the sector suffered under multiple sector agencies with overlapping and sometimes contradictory responsibilities. Studies under the on-going Private Sector Energy Project (Cr. 2754-IVC) have led to recommendations to rationalize sector institutions, starting in 1999. Under this plan, Government will reorganize the power sector into three institutions: (i) an owning company "Société de Patrimoine", responsible for the safeguard of the State's assets including accounting and financial management; (ii) an independent but public buyer *(Société Mixte),* responsible for system planning, power purchases from IPPs, import/export and sales of power to the distribution company; and (iii) a regulatory agency responsible for regulating the sector at arm's length from Government. Consultants, financed under Credit 2754-IVC are assisting the Government in setting up a regulatory agency, and in designing a new tariff and an adjustment mechanism. IDA is satisfied that these reforms are being implemented effectively.

21. *Tariffs.* To maintain the financial health of the sector, the Government, under Credit 2754-IVC has agreed to maintain certain key financial ratios (see para. 48). These ratios have all been met for the past three years as the level of tariffs has been adequate. In view of the large investment in the sector relating to the Azito project, the Government has authorized a modification to the tariff structure. The overall effect of this adjustment will be to increase revenues to the sector by about 6 percent annually, starting in November 1998. Under this arrangement, the social tariff has been protected. This ensures that low income families have a minimal supply at a subsidized tariff. Financial projections for the sector (Annex 5) indicate that the current level of tariff is satisfactory to maintain the financial health of the sector with the Azito project.

C: PROJECT DESCRIPTION SUMMARY

Cost breakdown: Project Components

(See Annex 2 for a detailed description of the project and Annex 3 for detailed project costs and financing plan).

22. The project consists of a Power Plant and a Transmission component. The Power Plant is expected to be undertaken in three phases although the scope of the existing project is limited to the first two phases. Phase I, an open cycle gas turbine of 150MW, is currently under construction and is scheduled for commissioning in January 1999. Phase II consists of an open cycle gas turbine of 150 MW, which is scheduled for commissioning in January 2000. The configuration and timing of Phase III will be decided at a later stage, depending mainly on projected demand growth and on the possibility of financing the additional investment. The Transmission component, which will transport power from Azito to the existing power system and reinforce the existing grid, will be coordinated with the first two phases of the Power Plant: Unit 1 of the transmission component will consist of the construction of a 225 kV substation at Azito and the tapping of the Vridi-Abobo transmission line, through a 500 meter 225 kV connection. This is expected to be completed by December 1998. Unit 2 will consist of the construction of a double circuit 225 kV transmission line from Azito to the Abobo substation (about 18 km) and the extension of Abobo and Azito 225 kV substations. This phase is expected to be completed by June 1999.

Project Cost and Financing Plan

23. The total project cost is estimated at approximately US$223 million for the Power Plant and the Transmission components combined. The Project will be financed through a combination of equity, subordinated debt, and senior debt in the ratio of 20:10:70. The equity component will consist of approximately US$44 million of shareholders contributions. The shareholders have also committed to make available up to US$17 million as contingency finance for the project. The subordinated debt of US$20 million which will consist of US$10 million of convertible debt and US$10 million of fixed debt will be funded jointly by IFC and CDC.

24. Senior debt facilities of around US$140 million will consist of US$32 million in the form of an IFC A loan, approximately US$30 million as an IFC B loan, and approximately S$30 million of a commercial loan tranche to be guaranteed by IDA. The balance of the senior debt of US$48 million will be provided by a syndicate of bilateral and multilateral institutions led by the Commonwealth Development Corporation (CDC). The financing plan also includes US$18 million of internally generated funds from the operation of Phase I and a six-month debt service reserve (see Annex 3). This debt service reserve account is designed to be fully funded at the end of the construction period, 50 percent from debt and equity funds and 50 percent from surplus operating cash flow.

In addition, there will be a three months Escrow Account set up to facilitate payments to CINERGY, which will be funded by the Government. There may be further changes to the financial plan up to Financial Closure but these are not likely to be significant.

25. The financing has been structured as an integrated package for both the Power Plant and the Transmission components. CINERGY will onlend the financing for the transmission component to GORCI. This loan will be repaid on an annuity style repayment over a term of 12 years. Total senior debt for the Project has been limited to a level which would ensure a projected minimum debt service coverage ratio (DSCR)[3] of 1.4 for each year and an average DSCR of 1.6 during the life of the project.

26. Société Générale has been mandated by ABB to underwrite both the IFC B loan as well as the IDA Guaranteed loan which will be syndicated on a pari passu basis as part of the same financing package.

27. ABB has been asked by GORCI to implement this Project on an accelerated basis to prevent shortage of power anticipated from the beginning of 1999, both domestically and in neighboring countries. As a result, ABB has initiated construction on the basis of bridge financing secured on its balance sheet. This Facility will be repaid at Financial Closure from the Azito project financing, scheduled for December 1998.

Proposed IDA Guarantee

28. The proposed IDA Partial Risk Guarantee will provide coverage for loan default on scheduled debt service payments, of both principal and interest, relating to the IDA Guaranteed loan resulting from GORCI's failure to meet its payment obligations under the Concession and Contrat Clef En Main (CCEM) Agreements. Commercial risks, including completion and operations risks, and natural force majeure risks will be borne by the sponsors and commercial lenders. Most of these risks will be mitigated by the engineering, procurement and construction (EPC) and the operations and maintenance (O&M) contracts and various insurance arrangements. (See Risk Matrix Table below).

29. The obligations of GORCI, to be backstopped by the IDA Guarantee under the Project Documents, are detailed in the Guarantee provisions outlined in Annex 6. These relate to the following principal categories of risks:

- Breach of Contract by GORCI in terms of its payment obligations under the Concession Agreement relating to the purchase of power; the supply of gas and GORCI's repayment obligations under the CCEM Agreement relating to the Transmission contract.

[3] DSCR is calculated as the net operating cashflow after taxes, divided by senior debt service all for the relevant period.

- Political Force Majeure events, including expropriation.

- Changes in the law (including judicial decisions not in suspense as a result of an appeal) that would make the Project Agreements unenforceable and void, or have a material adverse effect on the ability of the Company to pay, or the lenders to receive payment of any guaranteed liability.

- Lack of currency convertibility or transferability in the event of a delinking of the CFAF and the FF or the Euro after 1999.

- Natural Force Majeure events limited to the Transmission component following transfer of ownership to GORCI at Provisional Acceptance.

30. The Guarantee Agreement will be signed between IDA and the Agent Bank, on behalf of the commercial lenders. Under the Agreement, the lenders will be entitled to make a demand for that portion of any principal and/or interest payment which has fallen due and has not been paid by CINERGY as a result of the failure of GORCI to pay certain amounts due under the Concession and CCEM Agreements. The Guarantee may only be called once the debt service reserve and Escrow Account have been accessed and there remained a shortfall in the debt service payment to lenders (see Annex 6). In the case of a dispute, the IDA Guarantee would be callable only if GORCI is obligated to pay and has failed to pay as determined in accordance with the dispute resolution provisions in the Concession and CCCM Agreements. In keeping with the Board Paper on IDA Guarantees, the PRG structure would be non-accelerable, although IDA would have the option, at its sole discretion, to prepay outstanding principal and accrued unpaid interest. In the event that the Project is terminated as a result of a GORCI default, IDA would make payments in accordance with the amortization schedule pre-agreed with the commercial banks in the Loan Agreement. IDA would seek reimbursement for any payments to lenders from GORCI, on the same basis, under its Indemnity Agreement. This is designed to help phase GORCI's liability in the event of a call on the Guarantee.

31. Under the Indemnity Agreement, IDA would reserve its rights to demand immediate payment from GORCI for any amounts paid to lenders should the Guarantee be triggered. Only around 20 percent of senior debt would be covered by the PRG and, therefore, any default of GORCI would impact on all the senior lenders because of the project security sharing arrangements. In such an event, the senior lenders could enforce their security and cause a termination of the Project. Consequently, there is a clear financial disincentive for GORCI to cause a call on the Guarantee.

PRG Risks

32. The potential risk faced by IDA is of the Guarantee being called as a result of the occurrence of any of the specific events detailed in Annex 6. The principal potential risks to IDA relate to: (i) the adequacy of sufficient revenues to enable GORCI to pay for the

power to be generated; (ii) the availability of sufficient gas for the Project; and (iii) the transferability of the CFAF in the event of a delinking of the CFAF from the FF/Euro.

Proposed Risk Sharing Matrix

Phase	Risk/Obligation	Investors & Lenders	GOCI	IDA PRG
Pre-construction	Project Design	x		
	Debt & Equity Financing	x		
Construction	Cost Overrun	x		
	Construction Delays	x		
	Access to public land for construction works		x	
Operation	Operation and Maintenance	x		
	Output quality specifications	x		
	Supply of Fuel		x	x
	Tariff Payment		x	x
Concession Term	Currency Devaluation		x	
	Currency convertibility and transferability	x	x3/	x3/
	Political Force Majeure 1/		x	x
	Changes in Law		x	x
	Expropriation		x	x
	Natural Force Majeure 2/	x	x4/	x 4/

1. Political Force Majeure: terrorism, sabotage, guerrilla acts, war (declared or undeclared), civil disorder, national and regional strikes, coups d'Etat, etc.
2. Natural Force Majeure: acts of God, earthquakes and hurricanes, fires, floods, etc.
3. Contingent risk in the event of a delinking of the CFAF/FF (Euro).
4. Relating to the transmission system post completion.

33. **Sector Revenues**: The most significant potential risk associated with the Project is that of non-payment by GORCI for the power delivered by CINERGY. At present the transmission and distribution of electrical power, including imports and exports of power, are a monopoly of the State and are carried out as a national public service. CIE is empowered by GORCI to manage on its behalf the production and distribution of electricity, as well as the financial flows of the sector. As a result, although the power purchaser is GORCI, the power would be delivered by CINERGY to CIE for distribution. Payments for the power generated would also be made by CIE, since it has responsibility for the collection of all electricity revenues directly from consumers. CIE allocates these revenues according to the following order of priority: (i) payments for all CIE's costs related to power generation and distribution and its fees; and (ii) payments for all taxes, duties, fees, and royalties. Under (i) would be included payments to fuel suppliers and to IPPs such as CIPREL and Azito. The net balance is then transferred to Fonds National de

l'Energie Electrique (FNEE), the national fund for the electricity sector, for repayments of sector debt as well as to finance new investments.

34. It can be seen from the financial projections up to 2006 (in Annex 5) that current levels of retail tariffs would generate sufficient revenues to support payments to the fuel suppliers and IPPs, including Azito, and to finance new investments in the sector. With an IPP tariff of 4 cents/kWh (including the cost of fuel), and a retail tariff of 10 cents/kWh, it is clear from the projections that an IPP will not be a drain on the sector. In addition, the privately managed distribution segment has a 99% collection efficiency.

35. The risk of GORCI not meeting its payment obligations is further mitigated by the priority of payments afforded to CINERGY, along with the fuel suppliers and CIPREL. These payments will rank second only to the payment of CIE's fees. A GORCI Decree issued on 15th July 1998 provides for irrevocable instructions to be issued by FNEE to CIE to make such payments directly to CINERGY, along with CIPREL and the fuel suppliers. As funds from the sector will not be transferred to FNEE/CORCI until the above payments are made, the Project will be insulated from the payment risk of GORCI. In addition, in the Direct Agreement concluded with the lenders, GORCI has undertaken not to allow any new entrants to the energy sector (both producers of power or/and fuel suppliers) unless GORCI complies with certain sector conditionality. This conditionality requires GORCI to demonstrate to the satisfaction of lenders that a sectoral ratio of 1.3 (total sector revenues less CIE's fees divided by the payment to fuel suppliers and IPPs) will be maintained. The financial ratio will be based on the three-year financial projection for the sector and would take into account the financial impact of the proposed new entrant. Should this ratio not be met, payments to the new entrant would be subordinated to existing private power/gas entities. This conditionality would also apply to the proposed Phase III of Azito. In addition, GORCI has given a further undertaking to the lenders to maintain retail tariffs at a level to ensure the maintenance of this financial coverage ratio.

36. **Gas Supply**: Côte d'Ivoire currently has about 1.3 tcf of proven gas reserves, sufficient to meet projected gas demand for the next 15 years for current and new off-takers, including Azito as well as industrial consumers. To secure gas supply for the electricity sector, the Government has concluded Gas Supply Agreements on a take-or-pay basis with Blocks CI-27, and C1-11. Block C1-11 is operated by UMIC which is currently the only gas producer in Côte d'Ivoire, which has produced in excess of its contractual delivery commitments of 70mmcfd. Production is expected to begin to decline from C1-11 after 2000 when Block C1-27 from the Foxtrot Development Area will become the main source of gas for the Project. The Foxtrot field is being developed by a Consortium consisting of Petroci (Govt. Oil & Gas utility) the Bouygues Group of France with Apache (a US oil and gas company) as Operator. The gas supply contract (GSC) signed between the Consortium and the Government provides for the supply of gas over a ten year period (extendible) with a contractual delivery capacity of 65mmcfd with a take-or-pay commitment of 50mmcfd. Production, which is expected to commence by January 1999, will be maintained for power generation well beyond 2010.

Foxtrot gas will be delivered by a pipeline to Azito, the construction of which is nearing completion. UMIC's pipeline from Vridi to the Azito plant is also nearing completion,

37. Gas production from Foxtrot is expected to be supplemented from a re-development of the Espoir field, contained in Block CI-26. A US company, Ranger, is planning to redevelop the Espoir field. This re-development will produce associated gas from the East field and non-associated gas from the West field. Ranger's estimated reserves of these fields are 40 bcf of associated gas and 156 bcf of non-associated gas. Most of the geological and reservoir engineering studies have been completed and initial oil production is planned for July 2001 with non-associated gas production to follow in 2001 (See Annex 4).

38. Gaffney, Cline and Associates, the lenders gas consultants, have confirmed that there is sufficient volume of proven plus probable gas reserves from fields currently producing or under development to meet projected gas demand through to year 2015, well beyond the term of the IDA Guarantee. The gas supply risk would be further mitigated by GORCI's undertaking to the lenders not to develop new projects which would utilize or export gas, unless there are sufficient proven reserves.

39. **Foreign Exchange Convertibility and Transferability:** Côte d'Ivoire belongs to the West African Monetary Union and its currency is pegged to the FF and is transferable and freely convertible. Under the Project Agreement payments for power will be billed in US dollars but payment by GORCI will be in CFAF. Because of the guaranteed convertibility of the CFAF vis-à-vis the French Franc by the French Treasury, the commercial lenders have obtained transferability and convertibility undertakings from GORCI only in the event of a delinking of the CFAF from the FF, or the Euro after 1999. Consequently foreign exchange transferability and convertibility would be covered by IDA only as a contingent risk, in the event of a delinking of the two currencies. This would not include supporting a fixed exchange rate parity. Although this could be a potential risk for IDA, there are strong indications from the European (EU) that it supports the French Treasury's backing of the CFAF. This was confirmed in a recent Agreement signed on 6th July 1998 by the EU Finance Ministers who endorsed support for the accords that founded the franc zone.

Key policy and institutional reforms supported by the project

40. Key policy and institutional reforms have already been initiated under the on-going Private Sector Energy Project (PSEP) (Credit 2754-IVC). A Power Sector Reform study financed under this Project has identified the most pressing shortcomings in sector structure and proposed measures deal with these, taking into account GORCI's policy of opening the energy sector to private sector participation, promoting competition where possible and enforcing regulation. In August 1998, GORCI agreed to dismantle Energie Electrique de Côte d'Ivoire, the national electricity company, along with GPE (which represents the sector institutions responsible for implementation of the PSEP), FNEE (responsible for the management of financial flows of the sector), Groupe Spécial pour

l'Electrification Rurale (GSPER) (responsible for the rural electrification program), Direction de l'Energie Electrique et des Energies Nouvelles (DEEN) (to which most of the sector responsibilities were assigned), and BNETD (for power sector activities only). With the dismantling of these institutions, GORCI is aiming to create three new entities by early 1999: (i) a holding company, a Société de Patrimoine; (ii) a Regulatory Agency; and (iii) an Independent Buyer. The new structure will give the Independent Buyer, which is expected to be a Société Mixte, responsibility for negotiating power purchasing agreements and paying for power purchased, thereby removing GORCI from this activity. The Azito Project, will help provide necessary momentum for implementation of these reforms, encourage diversification and increase the number of producers of electricity

Benefits and target population

41. The project would have economic, social and environmental benefits. These include (i) increasing the supply of electricity to homes and businesses at reasonable cost; (ii) providing power for extending the supply to rural areas; (iii) rationalizing public expenditure by directing energy infrastructure development to the private sector; and (iv) producing global environmental benefits, since natural gas is a clean burning fuel. In addition, since the project uses a cost effective local fuel source, it will generate savings in foreign exchange by reducing the import of petroleum fuels for power generation.

Institutional and Implementation Arrangements
Implementation period: September 1998 - June 2000

42. *Executing Agencies:* The project will be implemented by CINERGY, the consortium led by ABB. ABB will coordinate, as necessary, with Ivorian sector institutions principally the Ministry of Energy and the Bureau National d'Etudes Techniques et de Développement (BNETD). BNETD will have an oversight role.

43. *Project Contractual Arrangements*: The contractual structure of the transaction is in line with industry standards with respect to the allocation of commercial, technical and political risks among the parties in a limited recourse project financing structure. The contractual structure consists of: (i) the Concession and CCEM Agreements between CINERGY and GORCI; (ii) the EPC contract for the power plant and the CCEM transmission for the system between CINERGY and the EPC Contractors, and (iii) the O&M contract for the power plant between CINERGY and the O&M Contractor.

44. The Concession Agreement, which has a term of 24 years, defines the rights and obligations of the Sponsor and GORCI. These include provisions for the purchase of power to be generated in the form of capacity and energy payments for the plant, with a minimum payment of 75 percent of available capacity. Capacity payments will consist of a foreign and local currency component with the foreign currency component fully indexed to the CFAF/USD exchange rate. Fuel will be supplied by GORCI at no cost to the Project, subject to heat rate guarantees. However, retail tariffs will fully reflect the cost of gas used for power generation.

45. The CCEM defines the rights and obligations of the State and CINERGY with respect to the construction and transfer of the Transmission component to GORCI, and the payment by GORCI for the assets over a term of 12 years.

46. The EPC contract for the plant is with a consortium of three qualified subsidiaries of ABB: (i) ABB Power Generation Ltd. (Switzerland), the consortium leader; (ii) ABB SAE Sadelmi S.p.A. (Italy); and (iii) SIM Societa Italiana Montaggi S.p.A. (Italy). The consortium's obligations will be guaranteed by a financially acceptable affiliate of ABB. A separate consortium of two qualified ABB subsidiaries (ABB High Voltage Technologies Ltd. (Switzerland) and ABB SADESPA (Spain)) will construct the Transmission component. ABB is well established in Côte d'Ivoire, having already built major portions of the country's transmission and distribution systems.

47. ABB Operation and Maintenance Ltd. of Switzerland, will have prime responsibility under the O&M contract during the first six years of Azito's operations. EdF will take over the O&M contract for the remaining term of the Concession Agreement. ABB will remain responsible for major services and the provision of spares. The Transmission component will be transferred to GORCI upon completion and its operation will be assumed by CIE.

48. *Accounting, financial reporting and auditing arrangements*: The Ministry of Energy will make suitable arrangements for IDA to have access to the necessary technical and financial data, including CINERGY's annual reports and FNEE audit reports.

D: PROJECT RATIONALE

Project alternatives considered and reasons for rejection

49. Alternatives to the proposed Project that were considered include a strategy to import and generation from non-natural gas technologies. An assessment of import options showed those not to be feasible at present due to the unavailability of surplus power in the region. Alternative generating technologies using thermal, hydro or solar were also assessed and were evaluated as being more expensive than gas-fired turbines. An important economic advantage is that natural gas to be used by the Project is an indigenous resource. As well as being a cost-effective source of fuel for the Project, indigenous gas generates income for GORCI from production sharing and royalties. The Project was bid on a competitive basis.

Major related projects financed by the Bank/IDA and/or other development agencies
(completed, ongoing and planned):

Sector issue	Project	Latest Supervision (Form 590) Ratings	
		(Bank-financed projects only)	
		Implementation Progress (IP)	Development Objective (DO)
Bank-financed			
- Increase private participation in the power sector	Private Sector Energy Project (Cr. 2754) ongoing.	S	S
- Support macroeconomics reforms	Economic Mgmt. (Cr. 2503) ongoing	S	S
- Divestiture and capital market development	Privatization Support (Cr. 2363) ongoing	S	S
- Increase internal and external competitiveness	Private Sec. Develop. (Cr. 2843) ongoing	S	S

IP/DO Ratings: HS (Highly Satisfactory), S (Satisfactory), U (Unsatisfactory), HU (Highly Unsatisfactory).

Lessons learned and reflected in the project design

50. The Bank Group has been involved in the energy sector in Côte d'Ivoire since the first Power Loan (Ln. 1896-RCI) in 1980. A 1982 Petroleum Exploration Project (Ln. 2189-RCI) confirmed Côte d'Ivoire's hydrocarbon potential, and indicated that incentives were needed to attract private interest in hydrocarbon exploration and development. Bank support for energy sector reform goes back to early 1986 when, as part of SAL III, the Government adopted a first set of measures aimed at reforming energy policies. The principal lesson learned from implementation of the Energy Sector Adjustment Loan (Ln. 3150-IVC-Project Completion Report No. 11532) is the need to rely on the private sector for development of Côte d'Ivoire's energy resources through a suitable incentive framework. The Azito Project incorporates this lesson, as well as the lessons learned from implementation of CIPREL, the first IPP in the country. This drew attention to the weaknesses in the sector's legal and regulatory framework, the dispersion and overlapping roles of sector institutions and measures needed to assure the financial equilibrium of the sector. These issues are being addressed through the ongoing Private Sector Energy Project (Credit 2754-IVC).

51. Important lessons which have emerged from Pakistan's experience also have been incorporated into the Project design. First, the Azito project financing has been structured so that the performance of the underlying contracts will be assured by the private sector distribution company and the gas producers, without GORCI's direct intermediation. Second, the commercial lenders and IFC have obtained undertakings from GORCI that new entrants (e.g. IPPs) to the sector would be contingent upon maintenance of certain financial ratios for the sector. Third, the Project is an integral part

of GORCI's overall power sector reform strategy, which is monitored under an ongoing IDA lending operation (Private Sector Energy Project, Credit 2754-IVC).

Indications of Government commitment and ownership

52. In 1997/98, West Africa, with the notable exception of Côte d'Ivoire, experienced sustained power shortages due to drought, with severe consequences to the economies of the region. To ensure that Côte d'Ivoire does not suffer from such shortages in the future, GORCI has been diligent in moving the Azito Project toward speedy implementation. GORCI took measures to meet all agreements negotiated with ABB and the lenders including ratification of the Azito Project Agreements, the decree setting payment priorities from the sector financial flows, and revising the structure of tariffs to generate more resources for the sector. In addition, GORCI formally requested the IDA Guarantee to help ensure the completion of the financing of the project.

Value added of IDA support in this project

53. As anticipated in the IFC Board Paper, an additional commercial loan tranche supported by an IDA Partial Risk Guarantee has been requested by GORCI to fund the incremental cost of the Transmission component. At the time of the bid for Azito, it was envisaged that GORCI would finance the Transmission component from its own resources. However, at the time of bid award this was not possible, since GORCI did not have the necessary funds. The Government then requested ABB to raise the additional financing. Azito lenders, including IFC, were not prepared to proceed with the financing of the Power Plant without the transmission facilities to evacuate the power to be generated. ABB explored alternative sources of finance for the incremental investment amount, including the possibility of an increase in the IFC B loan. The commercial debt market for Cote d'Ivoire is limited to only modest amounts of short term finance and an increase in IFC B loan was not possible, particularly in the context of the current emerging market crisis. Thus IDA's involvement was sought as a 'lender of last resort,' to fund the financing gap. This was subsequently followed up by a formal request by GORCI for an IDA Guarantee.

54. IDA support would help to make the Project bankable by catalyzing the IFC B loan and other debt equity financings of over US$180 million, with a minimum participation of less than 15 percent of total financing. The IFC B loan and the IDA Guarantee will be syndicated on a pari passu basis as part of the same financing package. In this way the Guarantee will help to catalyze mobilization of the largest commercial financing for Cote d'Ivoire to date, of about US$60 million, by making the risk profile acceptable to the lenders. IDA's credit enhancement is a condition to *Société Générale*'s underwriting commitment of the commercial financing package. The IDA Guarantee would also help to extend the term of the financing to 12 years compared with a ten-year tenor for the IFC B loan. *Société Générale* has indicated that it would charge CINERGY a spread of 275 basis points per annum on LIBOR for extending the IDA guaranteed loan (a reflection of current market appetite for doing business in an emerging market country

and the commercial risks being assumed by the lenders). In addition, CINERGY would pay IDA a Guarantee Fee of 75 basis points per annum on outstanding amounts of the loan, consistent with the pricing guidelines of the Board Paper on IDA Guarantees.

55. Although IDA is actively assisting GORCI in sector reforms, the existing sector framework at this transient stage of sector evolution provides for GORCI to be both the purchaser of power and the supplier of gas. Since GORCI's contractual undertakings in the Concession Agreement reflect this arrangement, the underlying risk is perceived by commercial lenders as political rather than commercial, as these activities are within the control of GORCI. Given this arrangement, the project financing has been structured in a way which provides for mechanisms to ensure that the performance of the underlying contracts is assured by the private sector distribution company and the gas producers, without a requirement for intermediation by GORCI.

56. IDA's PRG for Azito is a logical sequel to its support for the CIPREL financing and its objective of promoting private sector development in the sector. The PRG, compared with an IDA credit, is particularly suited to help governments transition from public to private finance through political risk mitigation and effective risk sharing with project sponsors and lenders (see Risk Sharing Matrix on page 10). The IDA Guarantee catalyses commercial finance and, thereby, helps to leverage IDA resources over a larger number of projects; the PRG would tie up IDA's resources for 12 years, while the IDA credit terms are generally for 40 years, as in the case of CIPREL. Since this would be the first IDA Guarantee, it should have an important demonstration effect for private sector participation in the country and the Region.

E: SUMMARY PROJECT ANALYSIS

Economic
(Annex 4):

55. The cost per kWh to be delivered by the Azito Power Plant was the basis for bid evaluation. The cost of the Project resulting from this bidding process will be 11.94 CFAF/kWh (US cents 2.02/kWh) for the first ten years decreasing to 6.00 CFAF/kWh (US cents 1.01/kWh) by the sixteenth year, without the cost of gas. This compares to a fixed price of 11.61 CFAF/kWh (US cents 1.96/kWh) for CIPREL without gas. The Azito price of energy is reasonable compared to recent international prices for IPPs, especially in Africa. The Project is an economic option for supplying additional electricity to Côte d'Ivoire.

56. The Transmission component of the project was awarded to the developer who had won the bid for the Power Plant. Two independent engineering firms examined the cost of the component as quoted by ABB. Each firm concluded that the cost is within the expected price range for the scope and supply of the works required.

Cost-Benefit Analysis:

57. The benefits of the Project are those resulting from the final uses of the electricity generated by the Azito power project. Development of a domestic natural gas resource also generates employment and revenues for the Government. Additional benefits, not readily quantifiable, are the creation of a climate conducive to private participation in the provision of electricity. Power demand has grown by 12 percent per annum since the CFAF devaluation in 1994 and remains strong, while GDP has grown by 6 percent per annum. If power demand were to grow at 7 percent per annum, as forecast, the economic rate of return of the project would be 21 percent. However, to take into account the possibility of an economic downturn, lower levels of demand were used for the sensitivity analysis. For example, a decrease in the demand growth to 4 percent, would reduce the rate of return for the project to 10 percent, and would require a one time tariff increase of 5% in year 2000 to make up for the reduction in revenues.

58. The Project's levelised tariff calculated over the project life (at a 10 percent discount rate) is 1.8 cents/kWh excluding fuel costs and 4.1 cents/kWh including fuel (based on a gas price of US$2.75/mmbtu as used for bid comparison). These are among the most competitive rates in Africa.

Financial
(Annex 5):

59. Financial Flows of the Sector. The current level of electricity tariffs, after the newly approved modification to the tariff structure, is sufficient to ensure payment obligations to independent power producers (CIPREL and Azito) and to fuel suppliers, and to meet the other financial needs of the sector. Credit 2754-IVC has four financial covenants to assure an adequate level of tariffs is maintained to safeguard the financial health of the sector, namely:

- a rate of return on net value of fixed assets of not less than 8 percent;
- an operating ratio not higher than 0.85;
- a debt service coverage ratio of at least 1.5; and
- a self-financing ratio of not less than 20 percent.

60. All of the above covenants so far have been respected. The Financial projections up to 2006 indicate that these covenants will continue to be respected, at the current tariff level with the assumed level of sector investments. To meet these covenants, it has been assumed that a minimum level of investment in rural electrification will be made in the years 2000 and 2001.

61. Projected Financial Performance of the Project: The base case projections, which assume a net at-site capacity of 144 MW per turbine and a 75 percent utilization factor, indicate that the Project will achieve a minimum yearly DSCR of 1.4 in all years and an average DSCR of over 1.6 during the duration of the loans. The Financial Rate of Return

(FRR) is estimated at 17 percent. The Return on Equity (ROE) before withholding tax is estimated at 16.5 percent.

62. Main performance indicators are not significantly affected by changes in key parameters, including reduced plant output, higher than expected heat rate, or a delay in Project implementation. This robustness is due in part to the level of liquidated damages negotiated under the various EPC contracts, which would be applied to reduce the total debt of the Project. The FRR and Economic Rate of Return (ERR) of the Project would be most affected by a reduction in demand growth and by an increase in project costs. A 10 percent increase in cost would reduce the FRR and ERR to 15 percent and 18 percent, respectively. Financial performance, however, is not significantly affected by the dispatch level of the plant, since the major portion of Project revenues are in the form of fixed capacity payments.

Technical

63. The award of the Azito project was made following competitive bidding among six pre-qualified developers. The technical issues associated with the effective execution of the project include: construction of the natural gas pipeline; the construction of the transmission line; and supply of natural gas to the Azito Power Plant at no cost. All the technology to be used is well-known and well-proven and in fact the project is now under construction.

Institutional

64. Executing agencies: CINERGY S.A., (the Project Company), a special purpose company registered in Côte d'Ivoire for implementation of the Project, will be owned by the three sponsors: (i) ABB Energy Ventures, B.V. (ABB-EV), the project developer and a subsidiary of Asea Brown Boveri Limited (ABB), with 37.74 percent; (ii) Electricité de France (EdF), the French national electricity utility, with 36.26 percent; and (iii) Industrial Promotion Services (Côte d'Ivoire), S.A. (IPS-CI), a unit of the Aga Khan Fund for Economic Development, with 26 percent. The Sponsors collectively will provide engineering, technical, and management expertise, as well as the necessary local knowledge to ensure the successful implementation and operation of the Project.

65. Project management: ABB-EV is taking the lead on behalf of the sponsors. It is assuming primary project management responsibility for the Power component and for the Transmission component until project acceptance. During construction an independent consulting engineer appointed by the lenders would provide timely supervision and reporting during construction to lenders, and to IDA as guarantor.

F: ENVIRONMENTAL ASSESSMENT
(Environmental Category A)

Social: Involuntary Resettlement:
(Annex 7)

66. Pursuant to the provisions of OP 14.25 on Guarantee operations, a resettlement action plan (RAP) for this project was prepared by GORCI and has been submitted to the Bank.. This is consistent with the requirements of Section 3 of OP 14.25 which stipulates that "Any project benefiting from a Bank guarantee must comply with all applicable Bank policies, including those governing disclosure of information and the environmental, social, and international law safeguards." The resettlement plan released to the World Bank InfoShop and in-country included an addendum. These documents were placed in the public domain in May 1998.

67. While processing the IDA guarantee, project documents were carefully reviewed to ensure compliance with the Bank's Safeguard Policies even though the project had already been approved by the IFC Board. In addition, a resettlement specialist was hired and sent to the field to verify whether issues reported in project documents were accurate and implementable.

68. With regard to involuntary resettlement, 659 families living or using the land under the transmission lines will be affected. These families comprise the largest part of the total of about 3,200 project-affected persons (PAPs). The families include owners and tenants living under the two transmission lines. Other affected persons are entrepreneurs and merchants in the informal sector. A further impact is on the village of Azito, which receive accruing compensation for the loss of 12 ha of communal land to the power plant. The compensation will be delivered to the community in the form of a (one million French francs)social fund. A third group of PAPs consists of a fishing community, comprising some 15 houses, which will be relocated due to the passage of the gas pipeline to the plant. For all project affected persons, a budget and contingency fund of about US $1 million have been budgeted for the implementation of the resettlement action plan (RAP).

69. Organizational arrangements for implementation of the resettlement plan include: (i) a Steering Committee comprising representatives of the Ministry of Environment and BNETD (the leading public works parastatal in Côte d'Ivoire); (ii) a Project Management Unit responsible for daily implementation of the RAP; and (iii) the Catholic NGO, CARITAS, which handles the consultation process and conflict resolution. It is estimated that compensation and resettlement activities, now under implementation, will be completed by March 1999.

70. Supervision of implementation of the RAP is undertaken by a *Comité de Suivi,* and the NGO, CARITAS, to ensure that the project implementation unit is performing its duties satisfactorily. In addition, a *Commission de Recours,* comprising religious leaders has been appointed to settle disputes and grievances. To ensure proper monitoring of the RAP, an independent monitoring and evaluation unit will be operational by December 1, 1998. A final post-resettlement evaluation is scheduled to be completed at least six months after all PAPs receive compensation or resettlement or both.

Participatory Approach

71. The Public Consultation and Disclosure Plan initiated by ABB/IPS consisted of information being made available to the public, consultation with the affected people, and disclosure of project documents.

72. A Public Documentation and Consultation Center was opened at Niangon from October 7 to 13, 1997, followed by a Public Hearing on October 14, 1997 which included the participation of several NGOs. Public meetings were held between March and April, 1998; six of these were organized by CARITAS. With the commencement of RAP implementation in August, 1998, there was an intensification of the consultation/ participation process through daily interaction between project field units and PAPs.

73. The Azito Power project recruited about 55 percent of unskilled labor from the population affected by the project. Negotiations are on-going to determine whether unemployed PAPs who are entitled to new houses at Williamsville or Route d'Adjame, could be hired to construct resettlement houses.

Biophysical Safeguards

74. The power plant will be using state-of-the-art technology and, in as much as oil consumption will be minimized, it will operate on clean natural gas fuel. Main concerns with the potential biophysical impacts of the Azito project are linked both to construction and operation of the project:

- power plant (EA draft report presented in October 1997 and finalized in August 1998)
- gas pipelines (UMIC and Apache pipelines EA report presented in July 1998)
- transmission lines (EA report presented in April 1998)
- access road (dealt with in the power plant's EA report)

The likely impacts of these components in the absence of safeguard measures have been assessed as follows:

Element	Risk in the absence of safeguard measures	Mitigation/monitoring measures
Air	Pollution, notably by NOx, in a neighborhood where increased urbanization is highly likely	Monitoring air pollution and warning of excessive levels Limiting use of fuel oil
Noise	Additional noise, notably a nuisance for the inhabitants of the Azito village	Anti-noise wall between the plant and the village Internal plant noise protection
Surface water	Physico-chemical pollution of the Ebrie lagoon by: • wastewater from the power plant • gas pipeline leakage	Monitoring wastewater Wastewater treatment Monitoring leakage and implementation of a contingency plan
Underground water	Pollution through: • salt water intrusion due to plant pumping • gas pipeline leakage	Monitoring groundwater quality Recylcing water and limiting pumping Monitoring leakage and implementation of a contingency plan
Soils	Pollution from waste oil and other miscellaneous wastes Erosion along the slopes of the Banco National Park	Close containers Monitoring erosion, physical erosion control works
Forest ecosystems	Tree cutting at the fringe of the Banco National Park (transmission lines)	Rerouting of the lines Selective tree felling
Landscape	Visual perception from the Banco National Park Lower tourism potential for the Boulay island	Landscaping Tourism development plan for the Boulay island
Health & safety	Accident risks in the plant or along the gas pipelines Impacts of Electro Magnetic fields around the transmission lines	Strict health and safety regulations Regular inspections Monitoring, medical study on the effects

75. For each impact, safeguard measures have been designed and responsibility assigned to mitigate and monitor effectiveness. The EA reports have been presented to the public and comments have been incorporated.

76. Most of the impact mitigation is the responsibility of the private consortium. Corresponding safeguard measures have been included in the agreement between the IFC and the consortium. All of the impact-safeguards are in place; however, the control of noise from the power plant to the neighboring communities is an area requiring additional measures which are currently being implemented.

77. Safeguard measures that need to be implemented by GORCI and which pertain to the fulfillment of GORCI's legal responsibilities are:

- finalization of the access road;
- finalization of the EA documentation;
- delivery of administrative authorizations required;
- monitoring of the implementation of the Consortium's safeguard measures;
- communication/information.

The Indemnity Agreement to be signed by GORCI and IDA, includes a covenant on environmental compliance. Under this GORCI undertakes to promptly carry out any action required to be performed by GORCI under the RAP, and the environmental management and monitoring plan

78. *Finalization of the access road.* This is not a safeguard measure per se, but is needed to complete the Project and provide the power plant with all the required infrastructure. Supervision of the road work will need routine supervision by an environmental team.

79. *Finalization of the EA documentation.* Based on the existing documentation, GORCI needs to finalize a synthetic document describing the safeguard measures (in non-technical language), to be implemented under the Project. This document should be made public within the coming months.

80. *Delivery of administrative authorizations required.* Several administrative authorizations remain to be delivered for the power plant to be fully operational, to receive gas supply and dispose of waste in an environmentally safe way. These administrative authorizations will be granted on the basis of a technical analysis of the requests.

81. *Monitoring of the implementation of the Consortium's safeguard measures.* GORCI will provide expert services to:

- assess the procedures proposed by the Consortium;
- monitor their implementation and keep track of this implementation; and
- if required, take corrective actions.

82. *Communication/information.* GORCI will:

- keep the Consortium informed of GORCI's administrative obligations and of the departments in charge of these obligations;
- serve as facilitator for conflict resolution in case of problems arising between the Consortium and the neighboring communities;
- report on the results of the monitoring; and
- inform the general public about the results of the application of the safeguard measures.

Implementation of the safeguard policies - need for technical assistance

83. GORCI will implement its component of the Environmental Management Plan (Plan Gouvernemental de Gestion de l'Environnement (PGGE)). An analysis of the present capacity of GORCI has led to the recommendation that technical assistance should be called upon very rapidly to ensure the smooth and efficient implementation of

the PGGE. GORCI has accepted this recommendation and will shortly recruit a consultant to assist with this matter.

84. Project implementation will be undertaken in the context of a multiplicity of public institutions for which the precise mandate may not yet be fully defined because of the recent reorganizations. This is particularly the case for the Ministry of Environment and Forestry, with its Directorate General for Environment, and the National Environmental Agency (ANDE). There will be clarification of the respective roles of the environmental management institutions during the coming months (institutional workshop programmed for mid-December 1998).

85. As Project implementation cannot wait for these clarifications to be made, the environmental management capacity will be enhanced through provision of additional technical assistance to (i) the Ministry of Environment and Forests, for impacts and (ii) the Ministry of Urban Affairs (Directorate of Housing) for involuntary resettlement aspects. This technical assistance will be put in place by early January 1999 and will remain for the following 12 months. The assistance will have an emphasis on training Ivorian counterparts. The cost of this additional technical assistance has been estimated at US$500,000 for about 25 person-months. This assistance will be funded from the on-going Private Sector Energy Project (Credit 2754-IVC).

G: SUSTAINABILITY AND RISKS

Sustainability

86. The sustainability of the Project will be under-pinned through a combination of the following factors: (i) commercial and economic benefits flowing to the Sponsors and to the Government of Côte d'Ivoire; (ii) private sector operation back by substantial financial commitment of the Sponsors; and (iii) the project's potential to catalyze further private sector investment in Côte d'Ivoire. An important consideration also is that the generating cost of the Project is much below the current tariff level; consequently the project does not add stress to sector finances.

Critical Risks

(reflecting assumptions in the fourth column of Annex 1):

Risk	Risk Rating	Risk Minimization Measure
Project outputs to development objectives		
Market/Project demand	Low	Demand for electricity was conservatively estimated. Payment arrangements with CIE and adherence to financial ratios in the sector.
Political Force Majeure	Medium	Stable political system. Competitive bidding selection
Project components to outputs		
Viable financing plan is put in place/Project completion risk	Low	Financial commitment of Sponsors and lenders and IDA PRG. Fixed Price Turnkey Contract. Track record of the Sponsors.
Gas pipeline is built and gas is supplied in adequate quantities	Low	Gas supply contract; substantial private investment in oil and gas, certification of reserves. Sector conditionality on new entrants.
Transmission system is built on time to evacuate the energy from the Power Plant	Medium	Fixed Price, Turnkey Contract. Track record of the Sponsors. Common financing and security structure as the Power Plant. Resettlement Action Plan (RAP) approved.
Project delays	Medium	Liquidated damages, Fixed Price, Turn-key Contract, Resettlement Action Plan (RAP)
Overall project risk rating	**Medium**	

Possible Controversial Aspects:

87. Possible controversial aspects include the resettlement of the population affected by the project.

H: MAIN GUARANTEE CONDITIONS

Conditions Precedent

88. The conditions precedent are the customary conditions for project financing of this type and include the following:

- execution of all project and loan documentation;
- delivery of an environmental management plan and a resettlement plan that meet IDA guidelines and implementation thereof;

- effectiveness of all required insurance (to include IDA as an additional insured on third-party liability insurance);
- firm commitment for sufficient financing to complete construction of the project, including the contribution of equity by the sponsors; and
- the first installment of the Guarantee Fee and the payment of the Initiation and Processing Fees.

I: READINESS FOR IMPLEMENTATION

89. The engineering, design and procurement for the project are complete. Construction has already started under a bridge loan financed by the developer. The first gas turbine is being installed, with commissioning expected by January 1999.

90. A Project Implementation Plan acceptable to IFC and IDA has been prepared

J: COMPLIANCE WITH BANK POLICIES

91. This project complies with all applicable CAS objectives and the IDA PRG is fully consistent with the Board Paper on IDA Guarantees.

FOR _____
Task Team Leader: Said R. Mikhail

_____
Sector Manager: Mark D. Tomlinson

_____
Country Director: Shigeo Katsu

Annex 1
Côte d'Ivoire: The Azito Power Project
Project Design Summary

Narrative Summary	Key Performance Indicators	Monitoring and Evaluation	Critical Assumptions
Sector-related CAS Goal: Promote growth through private sector development in the energy sector	Private sector participation widens in the energy sector Adequate tariffs are maintained to ensure sector financial viability	Bank economic and sector work	(Goal to Bank Mission) Economic growth is sustained and income distribution is not skewed.
Project Development Objective: Provide competitively priced electric power to satisfy demand	The levelized cost of a kWh produced by the Azito project is 8.70 CFAF/kWh (without gas). This is the lowest cost obtained through international competitive bidding.	1. Supervision mission reports 2. Project progress reports 3. Annual Financial Statements	(Objective to Goal) 1. Incentives for private sector participation continue to improve, including satisfactory tariffs 2. A legal and regulatory framework is put in place that is satisfactory and well enforced.
Outputs: Phase I and Phase II of the Azito Project comprising 300 MW of power are commissioned and approximately 1,900 GWh are supplied to consumers; the gas pipeline and the transmission system are constructed	Azito generated output and sales at least 1,900 GWh.	1. Supervision mission reports 2. Project progress reports	**(Outputs to Objective)** Projected demand materializes
Project Components/Sub-components: (see Annex 2 for project description) Power Plant Transmission Line **Total**	**Inputs**: (budget for each component, US$ million) **(Estimated)** 182 41 **223**	1. Supervision mission reports 2. Project progress reports 3. Project audit reports	**(Components to Outputs)** A viable financing plan is put in place An experienced contractor has been recruited to engineer, procure and construct the power station so that there are no delays. Gas pipeline is built and gas is supplied in adequate quantities. The Transmission system is built to evacuate the energy from the Azito Power Plant.

Annex 2

Côte d'Ivoire: The Azito Power Project
Project Description and Procurement

1. The Azito Power project is the second IPP in Côte d'Ivoire: CIPREL, which was the first, was developed in 1994. The Azito project was awarded to ABB in June 1997 following open bidding among six pre-qualified bidders who had expressed interest during the pre-qualification stage. Negotiations have been completed between the developer (ABB) and GORCI.

2. The procurement for Azito project was carried out in two lots. Lot 1 covered the Power Plant, and Lot 2 covered the transmission system. The two lots were bid together, with the condition that lot 2 was going to be financed by GORCI. The criteria for the bid evaluation for the Azito plant was the levelised energy tariff, for 24 years, excluding fuel price for all 3 phases of Lot 1 only, and the commissioning date. Lot 2 was to be awarded to the lowest bidder for Lot 1.

3. **Lot 1.** covering the Power Plant, consists of three phases:

a) Phase I is an open cycle gas turbine unit of 150 MW,
b) Phase II is an open cycle gas turbine unit of 150 MW, and
c) Phase III consists of the conversion of the first two phases into a combined cycle and adding 150 MW capacity through a heat recovery boiler.

Phase III is not included in the proposed project and its exact configuration will be decided at a later date, depending mainly on the availability and cost of natural gas. Phase I is scheduled for commissioning in January 1999, and phase II by January 2000.

4. **Lot 2** covers the evacuation of Azito energy to and through the existing transmission network and reinforcing the transmission system around Abidjan. This Lot consists of two sub-lots:

a) Unit 1 consists of:
i) the construction of a new 225 kV substation at Azito, and
ii) the tapping the Vridi-Abobo Transmission Line (TL), though a 500 meter 225 kV connection.
This sub-lot is expected to be in service by December 16, 1998.

b) Unit 2 includes:
i) the extension of the 225 kV Azito and Abobo substations, and
ii) the construct. of a double circuit 225 kV line between Azito and Abobo substations (about 17 km).
This unit is expected to be in service by June 16, 1999.

Annex 3

Côte d'Ivoire: The Azito Power Project
Total Project Cost and Financing Plan
(US$ Million)

Uses	Total	Sources	Total
EPC	110.86	Sponsors Equity[1]	43.89
Owners EPC Contingency	7.50		
Land for Power Stations	0.03	Senior Debt	140.50
Initial Spares	2.11	IFC A Loan	32.31
Insurances	2.10	IFC B Loan	30.20
Transmission Line	31.85	CDC & Others	47.77
Resettlement Indemnification	1.00	Commercial Lenders (IDA Guaranteed Facility)	30.20
Reimbursable Development Costs	18.20		
O & M Mobilization	2.58	Subordinated Debt	20.07
Initial Work. Cap. Required	2.19	Fixed	10.03
Buffer Stock	7.50	Convertible	10.03
Interest and Fees during Construction	22.24		
Debt Reserve	14.75	Cash from Operations	18.47
Total Uses	**222.94**	**Total Sources**	**222.94**

[1] Sponsors have committed an additional US$17 million in contingency finance.

Annex 4

Côte d'Ivoire: The Azito Power Project
Economic Analysis

Introduction:

1. The Electricity Sector: Prior to 1990, the state-owned Energie Electrique de Côte d'Ivoire (EECI) had a legal monopoly over generation, transmission and distribution. In 1990, with a view to improving the sector's efficiency, GORCI transferred the operation of the electricity sector to Compagnie Ivoirienne d'Electricité (CIE), a newly created private company, under a 15-year concession, although government retains ownership of gas and power.

2. Since 1990, CIE has substantially improved the management of the sector while earning a positive net income despite a 10 percent decrease in tariff in 1996. Uncollected bills from private customers were reduced from 10 percent in 1991 to less than 2 percent in 1997. Power outages decreased by 40 percent. System outages decreased from 37 in 1989/90 to 6 during 1994/1995.

3. CIE manages the financial flows of the sector on behalf of GORCI, but is not empowered to set tariffs. The weighted average retail power tariff in Côte d'Ivoire is 55.4 FCFA/kWh including taxes (about 9.55 cents/kWh) from November 1, 1998. This reflects GORCI's decision to modify the tariff structure to increase revenues to the sector by about 6 percent annually. This tariff is in the middle of the range for international retail tariffs. This tariff would allow a positive cash balance in the sector.

4. Fuel Supply to the Electricity Sector: At present, UMIC is the only producer, supplying 94 Mmscf/day from the Lion and Panthere fields. Other fields, in the proved and probable reserve group, expected to be developed by 1999 and 2001. Foxtrot (operated by Apache) and Espoir (operated by Ranger). The CI-01 fields of Kudu and Ibex (operator and development timing yet to be determined) are being considered as a possible gas reserve.

5. As shown in Table 2, the available quantities of gas are sufficient to meet the need of the Azito Power Plant. Beyond Azito, however, the question of gas supply should be revisited for every new gas fired Power Plant is contemplated.

6. Three demand scenarios were investigated: (i) a base case with a domestic load growth of 9 percent in 1999, and 7 percent thereafter; (ii) a medium case with 1 percentage point lower annual load growth from 1999 than in the Base Case; and (iii) a low case with 4 percent growth. The economic rate of return (ERR)was found to be 35 percent in the base case, 32 percent in the medium case and a 19 percent in the low case. This indicates a strong sensitivity of the ERR to demand growth. The Base Case is shown Table 3.

Table 1
Offshore Gas Reserve -- Volumes
Billion Standard Cubic Feet

Block	Field	Proved Ultimate Recovery	'Most Likely'[1] Ultimate Recovery	Cumulative Production through 01/01/98	'Most Likely' Remaining Reserves at 01/01/98	Possible gas Reserves
CI-11	Lion	76	76	28.5	47.5	
	Panthere	169	195	18	177	
CI-26	Espoir		196		196	
CI-27	Foxtrot	540	680		680	
CI-01	Kudu/Ibex					100
Total		785	1147	46.5	1100.5	100

1 'Most Likely' reserve volumes are the equivalent of proved plus probable reserve volumes.

Source: Gaffney, Cline & Associates, September 15, 1998

Table 2
Gas Production Forecast
(Million Standard Cubic Feet Per Day)

Year	Associated Gas		Non-Associated Gas			Total Supply	Demand
	C1-11 Lion	C1-26 Espoir	C1-11 Panthere	C1-27 Foxtrot	C1-26 Espoir		
1998	43.1		50.9			94.0	94.0
1999	35.1		41.5	41.5		118.0	118.0
2000	28.2	9.5	54.2	54.2		142.0	142.0
2001	20.2	32.0	42.6	42.6	4.7	142.0	142.0
2002	3.8	22.1	51.3	51.3	13.4	142.0	142.0
2003		10.7	54.6	54.6	22.1	142.0	142.0
2004		5.7	56.1	58.1	25.1	143.0	143.0
2005		4.5	58.2	58.2	26.0	143.0	143.0
2006		3.0	48.6	88.1	26.5	147.0	147.0
2007		3.3	20.6	96.2	26.9	147.0	147.0
2008		2.9	8.2	108.8	27.1	147.0	147.0
2009		2.6		117	27.4	147.0	147.0
2010		2.4		118.8	27.8	147.0	147.0
2011		2.1		115.8	29.1	147.0	147.0
2012		1.9		115.3	29.6	147.0	147.0
2013		1.8		115.8	29.3	147.0	147.0
2014		1.6		118.8	28.0	147.0	147.0
2015		1.5		117.5	28.0	147.0	147.0
1998-2015 total (Bscf)	**47.5**	**38.1**	**177.1**	**527.6**	**135.9**	**926.0**	**926.0**

Source: Gaffney, Cline and Associates (September, 15, 1998)

Table 3
Rate of Return - Base Case

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Investment Cost	185.93			**Incremental T&D cost:**							Export price:		0.055	CIPREL take or pay:	
2	fraction spent/year	0.445	0.555		$/kW	750						losses:	6%	0.0033	FCFA/kWh	12.2
3	Capacity MW	280			sys LF	0.67						net export revenue		0.0517	USD/kWh	0.021
4	plant factor	0.90			kWh gen	5869	per kW					Displacement values:				
5	O&M cost	phase 1	phase 2	total	kWh sales	4989	per kW					unit	btu/kWh	$/mmbtu	var. op	$/kWh
6	fixed O&M	4.10	1.55	5.65	Ann. Cost	92.67	$/kW	o&m%inv				TAV	14000	2.16	0.008	0.038
7	variable $mm	1.60	1.39	2.99	O&M	18.75	$/kW	0.025				TAG	14900	2.59	0.003	0.042
8	variable $mm/GWh	0.0017	0.0015	0.0016	AnnCost	111.42	$/kW					CIPREL	12100	2.59	0.002	0.033
9	fuel $mm/GWh	0.0284			sales phase-in:											
10	fuel price index	1.90%	decline per year to 2010		year	1	2	3	4 +			Fuel value calculation:				
11	sales:gen ratio	0.85			factor	0.25	0.5	0.75	1				$/bbl	hfo ratio	mmbtu/bbl	$/mmbtu
12		CFA/kWh	exch rate	$/kWh	sales	1247	2494	3742	4989			Crude oil	17.00	0.8	6.3	2.16
13	Tariff	52.20	591	0.088								Nat. gas		1.2		2.59
14																
15	Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
16	Year No.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
17																
18	partial prod. rate		0.322													
19	**Production**		711	2207	2207	2207	2207	2207	2207	2207	2207	2207	2207	2207	2207	2207
20	**Costs**															
21	Investment	82.74	103.19													
22	Fixed operation		4.10	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65
23	fuel		19.82	60.37	59.25	58.14	57.06	56.00	54.95	53.93	52.92	51.93	50.97	50.02	50.02	50.02
24	Variable operation		1.24	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59
25	**Total Cost**	**82.74**	**128.35**	**69.61**	**68.49**	**67.38**	**66.30**	**65.23**	**64.19**	**63.16**	**62.16**	**61.17**	**60.20**	**59.25**	**59.25**	**59.25**
26																
27	**Benefits**															
28	Incremental dom. Sales GWh		0	0	186	426	1023	1297	1591	1876	1876	1876	1876	1876	1876	1876
29	Tariff revenue		0.00	0.00	16.47	37.64	90.33	114.58	140.52	165.67	165.67	165.67	165.67	165.67	165.67	165.67
30	less T&D		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	**Netback to GEN**		**0.00**	**0.00**	**16.47**	**37.64**	**90.33**	**114.58**	**140.52**	**165.67**	**165.67**	**165.67**	**165.67**	**165.67**	**165.67**	**165.67**
32	Incremental Export sales GWh		636	898	752	752	752	640	315	0	0	0	0	0	0	0
33	**Export revenue**		**32.89**	**46.45**	**38.88**	**38.88**	**38.88**	**33.08**	**16.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
34	TAV Displacement GWh		400	400	400	400	0	0	0	0	0	0	0	0	0	0
35	**TAV displacement value**		**15.00**	**14.72**	**14.45**	**14.18**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
36	TAG Displacement GWh		500	500	500	500	204	0	0	0	0	0	0	0	0	0
37	**TAG displacement value**		**20.41**	**20.03**	**19.66**	**19.29**	**7.71**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
38	CIPREL displacement GWh		1640	351	287	5	0	0	0	0	0	0	0	0	0	0
39	**CIPREL displacement value**		**53.66**	**11.27**	**9.06**	**0.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
40	CIPREL unused take or pay		1460	171	108	0	0	0	0	0	0					
41	**CIPREL take or pay loss**		**-30.14**	**-3.53**	**-2.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**					
42																
43	**Total Benefits**		**91.83**	**88.94**	**96.29**	**110.16**	**136.92**	**147.65**	**156.80**	**165.67**	**165.67**	**165.67**	**165.67**	**165.67**	**165.67**	**165.67**
44																
45	**Net cash flow**	**-82.74**	**-36.52**	**19.33**	**27.81**	**42.78**	**70.62**	**82.42**	**92.61**	**102.51**	**103.52**	**104.50**	**105.47**	**106.42**	**106.42**	**106.42**
46																
47	**ERR**	**35%**														
48																

Annex 5

Côte d'Ivoire: The Azito Power Project
Financial Analysis

1. On behalf of GORCI, CIE manages the production and distribution of electricity. CIE collects all electricity revenues directly from consumers and retains from these funds: (i) a payment for all CIE's costs related to power generation and distribution, operation and management of services provided under the CIE Concession, and a profit margin; and (ii) a payment equal to the sum of all taxes, duties, and fees applied to the services provided under the CIE Concession. The operating expenses and the profit margin contain four elements: R1, R2, R3, R4 and R5.

2. R1 is CIE's remuneration, R2 is the component dedicated to fuel and electricity purchase from IPPs (i.e. CIPREL and Azito) or through imports, R3 reflects the value of electricity exported, R4 is for an adjustment account with CIPREL and R5 is a retention account for the financing of major repair/maintenance works. The net balance is transferred to FNEE, the national fund for the electricity sector, to repay the debt of the sector and finance new investments.

3. As shown in the above table, the current level of electricity tariffs are sufficient to ensure payment obligations to independent power producers (CIPREL and Azito) and to gas suppliers. It is expected, however, given the financial projections made on assumptions known today, that there will not be enough cash to attain the sector's financial objectives, namely: (i) a rate of return on net value of fixed assets of not less than 8 percent; (ii) an operating ratio not higher than 0.85; (iii) a debt coverage ratio of at least 1.5; and (iv) a self financing ratio of not less than 20 percent. A reduction in the ambitious rural electrification program or one-time tariff increase of about 10 percent would be necessary to achieve the above financial objectives.

Projected Financial Performance of the Project

4. The Azito tariff under the Concession Agreement is expected to be adequate to ensure the debt service payment of the senior debt with a minimum coverage ratio of 1.35 in the first debt repayment. Below is a summary of the projected financial performance of the Project.

5. The base case projections, which assume a net at-site capacity of 144 MW per turbine and a 75 percent utilization factor, indicate that the Project will achieve a minimum yearly DSCR of 1.4 in all years and an average DSCR of over 1.6 until at least 2012. The FRR is estimated at 17 percent and the ERR at 21 percent. The return on equity before withholding tax is estimated at 16.5 percent.

Summary of Projected Financial Flows of the Power Sector 1998 - 2006
(CFAF Million)

M.CFA		1996/97	1,998	1,999	2,000	2,001	2,002	2,003	2,004	2,005	2,006
VENTES RCI											
Energie facturée		**128,678**	**148,707**	**170,380**	**182,307**	**195,068**	**208,723**	**223,334**	**238,967**	**255,695**	**273,593**
(1) Energie encaissée (hors compensat°)		**118,770**	**137,257**	**157,261**	**168,269**	**180,048**	**192,651**	**206,137**	**220,566**	**236,006**	**252,527**
(2) Factures Publiques Compensées	40%	**7,721**	**8,922**	**10,223**	**10,938**	**11,704**	**12,523**	**13,400**	**14,338**	**15,342**	**16,416**
VENTES EXPORT											
(3) Energie encaissée		18,395	30,740	19,488	19,488	19,488	19,488	19,488	19,488	19,488	8,314
(4) RECETTES TOTALES (encaissées)	(1)+(3)	137,165	167,997	176,749	187,757	199,536	212,139	225,625	240,054	255,494	260,840
dont **Taxes**		16,986	19,570	22,095	23,642	25,297	27,068	28,962	30,990	33,159	35,480
(5) Energie nette encaissée		**120,179**	**148,427**	**154,654**	**164,115**	**174,239**	**185,072**	**196,662**	**209,065**	**222,335**	**225,360**
REMUNERATION CIE (Composante A)											
(6) TOTAL CIE		**52,477**	**55,494**	**58,412**	**60,960**	**63,505**	**66,228**	**69,141**	**72,258**	**75,594**	**79,163**
(7) Taxes disponibles pour B		**9,652**	**11,514**	**13,876**	**15,674**	**16,582**	**17,502**	**19,169**	**20,971**	**22,090**	**23,274**
(8) Disponible pour B	*(5)-(6)+(7)*	*77,354*	*104,447*	*110,117*	*118,829*	*127,316*	*136,346*	*146,691*	*157,777*	*168,831*	*169,471*
(9) Composante B		**39,694**	**67,119**	**68,416**	**88,940**	**94,290**	**97,590**	**104,049**	**111,041**	**115,313**	**115,873**
Total Fuel (pas de TVA)		**27,299**	**41,028**	**36,069**	**42,844**	**47,448**	**50,550**	**48,756**	**46,714**	**50,833**	**51,393**
Groupes isolés, divers back up	ddo / hvo	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Vridi TAV	fuel oil	8,232	12,579	4,200	0	0	0	0	0	0	0
Vridi TAG	gaz	6,456	8,326	5,031	4,710	4,710	6,500	4,710	4,710	7,290	7,850
CIPREL	gaz	10,611	18,123	15,512	18,615	18,615	18,615	18,615	18,615	18,615	18,615
AZITO	gaz	0	0	9,171	17,519	20,799	22,928	22,452	21,389	22,928	22,928
Surcoût ToP	gaz	0	0	155	0	1,324	508	980	0	0	0
Total IPPs		**12,395**	**26,091**	**32,347**	**46,097**	**46,842**	**47,040**	**55,292**	**64,327**	**64,480**	**64,480**
CIPREL (HT)		11,157	16,892	16,892	16,892	16,892	16,892	16,892	16,892	16,892	16,892
CIPREL (TVA)	11.1%	1,238	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875
AZITO : lot 1 (HT)		0	0	10,711	21,408	22,079	22,257	29,685	37,817	37,955	37,955
AZITO : lot 1 (TVA)	11.1%	0	0	1,189	2,376	2,451	2,471	3,295	4,198	4,213	4,213
AZITO : lot 2 (pas de TVA)		0	1,120	1,680	3,545	3,545	3,545	3,545	3,545	3,545	3,545
AZITO : comptes séquestres			6,204								
Ratio de couverture de B	*(8) / (9)*	*1.95*	*1.56*	*1.61*	*1.34*	*1.35*	*1.40*	*1.41*	*1.42*	*1.46*	*1.46*
(10) DOTATIONS CIE		9,700	9,700	9,700	9,700	9,700	9,700	9,700	9,700	9,700	9,700
Grosse Révisions	3,000	3,004	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Renouvellement	4,000	3,324	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Travaux liés à l'exploitation, divers	1,500	2,372	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Subvention branchements	1,200	1,000	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
(11) Redevance reversée au FNEE	*(8)-(9)+(10)*	*27,959*	*27,628*	*32,002*	*20,189*	*23,326*	*29,056*	*32,942*	*37,036*	*43,818*	*43,899*
Flux FNEE											
(12) Dotation fonctionnement EECI/FNEE		2,500	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
(13) Travaux EECI		2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
(14) Service dette intérieure		11,309	7,800	7,800	6,300	6,300	6,300	6,300	6,300	6,300	500
(15) Service dette "Nouveaux Emprunts"		402	788	2,517	3,223	3,273	3,599	5,267	5,124	5,705	5,665
(16) Service dette ext. réechelonnée théorique		13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800	13,800
(17) Service dette ext. réech. après compensation	(16)-(2)	6,079	4,878	3,577	2,862	2,096	1,277	400	0	0	0
(18) ER		4,500	5,000	5,000	804	4,657	5,000	5,000	5,000	5,000	5,000
Solde annuel (11)-(12)-(13)-(14)-(15)-(17)-(18)		1,169	2,162	6,108	0	0	5,880	8,975	13,612	19,813	25,734
Recettes Totales		129,830	159,941	168,529	179,789	190,821	202,573	215,832	230,035	244,425	248,635
Charges Totales		115,371	148,313	152,777	175,850	183,744	189,768	199,140	209,249	216,857	220,986
Resultat d'Exploit.		14,459	11,628	15,752	3,939	7,076	12,806	16,692	20,786	27,568	27,649
Capacite d'Autofin.		5,669	7,162	11,108	804	4,657	10,880	13,975	18,612	24,813	30,734
Investissements neufs		4,500	5,000	5,000	804	4,657	5,000	5,000	5,000	5,000	5,000
Actif Nets du secteur		300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Amortissements		9,000	9,000	9,250	9,250	9,250	9,250	9,250	9,250	9,250	9,250
Key Financial Ratios											
Operating Ratio < 85 %		89%	93%	91%	98%	96%	94%	92%	91%	89%	89%
Debt Service Coverageratio > 150%		132%	153%	180%	106%	140%	197%	217%	263%	307%	599%
Self-Financing Ratio > 20 %		126%	143%	222%	100%	100%	218%	280%	372%	496%	615%
Rate of Return on Assets > 8 %		5%	4%	5%	1%	2%	4%	6%	7%	9%	9%
M.CFA		1996/97	1,998	1,999	2,000	2,001	2,002	2,003	2,004	2,005	2,006

6. Various performance indicators are not significantly affected by changes in key parameters, including reduced plant output, higher than expected heat rate, or a delay in Project implementation. This is due in part to the level of liquidated damages negotiated under the various EPC contracts which would be applied to reduce the total debt of the Project. The FRR and ERR of the Project would be most affected by an increase in project costs. A 10 percent increase in cost would reduce the FRR and ERR to 15 percent and 18 percent respectively. Likewise, financial performance is not significantly affected by dispatch level of the plant, since the major portion of Project revenues are in the form of fixed capacity payments.

Source: Proposed Investment in the Azito Power Project - Republic of Côte d'Ivoire (IFC, June 1998, and Bank Staff Estimates)

Annex 6

Côte d'Ivoire: The Azito Power Project
Term Sheet for the IDA Guaranteed Loan and the IDA Guarantee

IDA Guaranteed Loan

BORROWER:	Cinergy, a société anonyme organized under the laws of Côte d'Ivoire.
GUARANTOR:	International Development Association.
FACILITY AMOUNT:	Up to US$35 million to be disbursed, amortizing to the end of the original term of the Facility based on the Repayment Schedule.
CURRENCY:	US Dollars
LEAD ARRANGER AND UNDERWRITER:	Société Générale as Lead Arranger and lender, together with a syndicate of banks consisting of the same participating banks as in the IFC B Loan facility.
AGENT BANK:	Société Générale
USE OF PROCEEDS:	Proceeds to be used for design, engineering, procurement, construction and financing costs of the Project (excluding development fees, local taxes and duties).
AVAILABILITY:	The Facility will be available for drawing subject to the satisfaction of all Conditions Precedent contained in the Common Agreement to the loan agreements and IDA Guaranteed Loan Agreement, from Financial Closure until 12 months after Scheduled Completion, and disbursed pari passu with the other loans to the Project.
DRAWDOWN:	Pari passu with the other loans to the Project.
TERM:	12 years
REPAYMENTS:	The Facility will be repayable in equal principal payments, in quarterly installments, starting on a date that is six months after the scheduled Commercial Operation Date of Phase II.

INTEREST RATE:	Variable rate based on 6 months US$ LIBOR.
MARGIN:	2.75 percent p.a. (indicative).
COMMITMENT FEE:	0.5 percent p.a. on undrawn commitments, payable by Cinergy, quarterly in arrears from signature of the IDA Guaranteed Loan Agreement.
FRONT-END FEE:	1.0 percent of IDA Guarantee Loan Amount payable by Cinergy within 30 days from signature of the IDA Guaranteed Loan Agreement or on first disbursement, whichever is earlier.
GUARANTEE FEE:	(a) During disbursement: 75 bp p.a. on disbursed amounts; 25 bp p.a. on undrawn amounts. (b) Thereafter, 75 bp p.a. on the outstanding amounts of principal as of the date of fee payment. All fees will be payable in advance of each interest period (the first fee payment would fall on the date of effectiveness of the IDA Guarantee Agreement, or 60 days from signature, whichever is earlier).
INITIATION FEE:	IDA will charge the Borrower a one time *Initiation Fee* of 0.15 percent of the Facility amount to cover IDA's internal project preparation and development costs, payable upon Board approval of the Guarantee. IDA will also charge a *Processing Fee* of up to 0.50 percent of the Facility amount to cover IDA's out-of-pocket and other expenses, payable as and when such expenses are incurred or as the Bank may otherwise demand.

GUARANTEE:

The *IDA Guarantee* is non-accelerable; however, IDA has the option at its sole discretion to prepay the lenders the outstanding guaranteed loan amount. IDA will guarantee to the Agent, acting on behalf of the IDA-guaranteed Lenders, amounts of scheduled principal and interest it would have otherwise received but for the failure of the Government to pay certain obligations under the Concession Agreement and CCEM Agreement, (reduced by any amounts the Lenders could withdraw from debt service reserve accounts), as further specified in such *Guarantee* and otherwise in a form and substance satisfactory to IDA and the guaranteed Lenders. If there is a dispute, the *IDA Guarantee* would be callable only in respect of amounts that the Government is obligated to pay, and fails to pay, in accordance with the dispute resolution procedures contained in the Project Agreements.

GUARANTEE COVERAGE:

(a) Breach of Contract: failure of Government to pay an amount due with respect to certain obligations under the Concession and CCEM Agreements, including the failure to pay the Termination Amount in respect of: (i) State Event of Default; (ii) Government payments resulting from Internal Events of Force Majeure. (Section 20.2.1(ii)); (iii) Expropriation or Nationalization (Article 27); and (iv) termination of the Concession Agreement due to unforeseen events, where the State has invoked that Section 26.1 and has failed to pay the Termination amount due in respect of such termination. (b) Foreign currency, convertibility and transferability: any restriction imposed under laws of Côte d'Ivoire on the conversion of CFAF into FF or the transfer of FF out of Côte d'Ivoire in the event of a delinking of the CFAF and FF. (c) Changes of law in Côte d'Ivoire (including judicial decisions not in suspense as the result of an appeal) making the performance of the Government of its obligation or the exercise by the Company of its rights under the Concession and CCEM Agreements or the exercise by the lenders of their rights under the financing documents void or unenforceable due to any change in the law of Côte d'Ivoire or such change having a materially adverse effect on the ability of the Company to pay or the lenders to receive payment of any guaranteed liability, and the effect of such changes in law continuing for more than 90 days.

EXCLUDED OBLIGATIONS:	Amounts owed by Government with respect to: Project Company Event of Default; Any event of natural Force Majeure, except those relating to the transmission line after acceptance by GORCI; Any event of Force Majeure taking place outside Côte d'Ivoire.
CONDITIONS PRECEDENT:	Usual and customary conditions for financing of this type including the following: (a) execution of all project and loan documentation; (b) delivery of an environmental assessment (addressing resettlement issues) that meets IDA guidelines; (c) effectiveness of all required insurance (to include IDA as an additional insured on third-party liability insurance); (d) firm commitment for sufficient financing to complete construction of the project, including the contribution of equity by the sponsors; and (e) Payment of the first installment of the Guarantee Fee, Initiation Fee and Processing Fee.
SUSPENSION OF ADDITIONAL COVERAGE:	If any of the following events occurs and is continuing, IDA may by written notice deny guarantee coverage to subsequent drawdowns: (a) any event which with the passing of time or giving of notice may lead to a claim on the *IDA Guarantee*; (b) default by the Borrower under the *Project Agreement;* (c) suspension of lending by IDA or the Bank to Côte d'Ivoire or breach by Côte d'Ivoire of its obligations under the *Indemnity Agreement*; or (d) suspension or lapse of Côte d'Ivoire from membership in IDA or the International Monetary Fund.

CESSATION OF COVERAGE:	Except in respect of demand notices already delivered to IDA, default in payment of *Guarantee Fees* will automatically terminate the *IDA Guarantee*. The *IDA Guarantee* will also terminate in the event that any changes are made without IDA's consent in those provisions of the project agreements for which IDA's consent is required for changes.
SUBROGATION:	If and to the extent IDA makes payment under the *IDA Guarantee,* IDA will be subrogated immediately to the lenders' rights, except that IDA may agree to waive its voting and enforcement rights prior to payment of its maximum guaranteed amount and not to be subrogated to the lenders' payment rights until Côte d'Ivoire has failed to reimburse IDA for the amount so paid in accordance with the terms of the *Indemnity Agreement* and such failure has continued for at least 60 days.
CLAIMS:	Claims must be made within 90 days of nonpayment; IDA will pay within 60 days thereafter.
GOVERNING LAW:	State of New York
	INDEMNITY AGREEMENT
PARTIES:	IDA and Côte d'Ivoire
INDEMNITY:	Côte d'Ivoire will reimburse and indemnify IDA on demand, or as IDA may otherwise direct, for any payment made by IDA under the *IDA Guarantee* and for all loses, damages, costs and expenses incurred by IDA with respect to the *IDA Guarantee*.
REMEDIES:	If Côte d'Ivoire fails to perform under the *Indemnity Agreement*, IDA may suspend or cancel, in whole or in part, the rights of Cote d'Ivoire to make withdrawals under any other credit with IDA.
CHOICE OF LAW:	The Indemnity Agreement will follow the legal regime and include dispute settlement provisions, which are customary in agreements between member countries and IDA.

PROJECT AGREEMENT

PARTIES	IDA and the Borrower
REPRESENTATIONS AND WARRANTIES:	The Borrower will represent, among other things, that it is in compliance with applicable environmental laws and other applicable IDA requirements.
COVENANTS:	The Borrower will covenant, among other things, that it will use the proceeds of the disbursements under the IDA Guaranteed Facility in accordance with the terms and conditions of the IDA Guaranteed Loan Agreement, comply with applicable laws, including environmental laws and other applicable environmental requirements, provide annual audited financial statements and regular access and reports to IDA.
COSTS AND EXPENSES:	The Borrower will reimburse IDA for out-of-pocket expenses in the event of amendment or enforcement of the agreements.
CHOICE OF LAW:	State of New York

Annex 7
Côte d'Ivoire: The Azito Power Project
Summary of Resettlement Measures

Components of Resettlement Action Plan	Phases of the project		Responsible Implementing Institution:	Specific Responsibilites	Period	Observations	Recommended Actions for and committments to be made by CI Government
1. Studies	**P**	**I**					
Social Impact Assessment	X		BNETD	Organize and carry out study	Should have been carried out early on during prep. of project	SIA was not carried out	
Socio-Economic Baseline Studies	X		BNETD	Organize and carry out study	February - March 1998	Very basic socio-economic studies and census were carried out and subsequently continous up-datings. Azito fishermen were included. Number of affected PAPs more than double since first census until Oct. 1998 when final number (under t-lines) was established.	Ensure that all PAPs are identified and socio-economic impact evaluated.
Resettlement and Compensation Plan with Addendum	X		BNETD	Prepare components of plan based on a s-e study and census	April - May 1998	RAP prepared by BNETD consultant (now Chef de Cellule de Projet), Addendum made by BNETD based on IFC remarks. No plan for Azito fishermen.	Prepare compensation/resettlement for fishing community at Azito.
2. Contracting of implementation agencies							
Project Management Unit (Cellule de Projet)	X	X	BNETD	Coordinate all r-plan activities, administration and finance	Contracts cover 18 August 1998 - 18 March 1999	Manages the process satisfactorily based on desicions by the Comite de Pilotage. Good and orderly documentation.	Provide TA (see below)
ONG (Caritas)	X	X	BNETD	PAP Info, consultation, participation, assist PMU with implementation	Contract renewed every two months, began in August 1998	Involvement of assistance character - maintaining communication with PAP, info/consultation/participation, also follow-up on ind. families.	Provide TA (see below)
Contractors for new sites		X	BNETD	Prepare resettlement sites, infrastructure works and houses	(i) Williamnsville Nord: contract signed October 1998, (ii) Adjama: Bids to go out October 1998	Local contractors is (and is expected to be) recruited for the works.	Ensure that sites and houses are ready to receive PAPs before transfer.
3. Administrative, Financial and Monitoring Controls							
Committe de Pilotage	X	X	Les Directeurs des MLCVE:	Make desicions concerning finance and	For the duration of the project	Have taken the desicions concerning compensation criteria etc. Will need to	1. Review compensation criteria and make necessary desicions to ensure adequate

Components of Resettlement Action Plan	Phases of the project		Responsible Implementing Institution:	Specific Responsibilites	Period	Observations	Recommended Actions for and committments to be made by CI Government
			Cadre de Vie (1), MIE: Bureau d' Etudes d'Impact (1), et BNETD: DIE (1)	other resources		again look at compensation package, namely: (i) no compensation has been confirmed for fishermen families living at the shore of Azito and who will be affected by gasoduct (ii) review compensation to Azito village for loss of 12 has of communal land to plant site (iii) possibly review cash compensation package, for example size of new houses and cash comp for additional houses (iv) install independent M/E Unit (v) market installation fee of 400,000 cfaf not included, need to be negotiated with local authority	compensations, especially concerning: (i) cash comp for houses (ii) size of new houses (iii) cash comp to tenants (iv) cash comp to merchants and artisans 2. Review budget for specific compensation/resettlement allocations to allow for modifications/additions
Comite de Suivi	X	X	DIE de BNETD (2), DERN de BNETD (1)	Follow up on management and implementation	For the duration of the project	BNETD is, together with MLCVE, responsible for implementation of the compensation/resettlement process, therefore an independent M/E unit is necessary in order to objectively monitor and evaluate the processes. Part of the follow-up should also be to ensure that no people return or install themselves under trans. lines once these have been vacated.	1. Create independent M/E Unit 2 Provide resources to ensure that new settlements under transmission lines will not be permitted.
ONG		X	BNETD	PAP consultation and participation process, assist with implementation	For the duration of the implementation phase, (contract)	Some concerns about logistic and capacity problems have been expressed. Solutions (office, vehicle, computer) are being sought with PMU and BNETD.	
Cellule de Projet (PMU)		X	BNETD (1 manager and 4 assistants),	Project management and implementation	For the duration of the implementation phase, (contract)	Although the PMU functions effectively there is a need for additional technical assistance (TA) which should be provided by (i) M/E Unit and (ii) donor missions	Create independent TA/M/E Unit under the responsibiltiy of Ministere du Logement
Commission de Recours		X	Representatives from religious communities	Receive and discuss claims and complaints from PAP, try to find solutions to serious matters.	For the duration of the project	So far this Commission has not had to deal with any complaints and grievances from PAPs.	
Independent Monitoring/Evaluation Unit		X	Resett. Specialist Consultant	Provide TA to PMU and NGO, follow up and evaluate resettlement	Contract will be signed for four months Dec 1, 1998 -	It is incremental to install this unit asap. Alternatively one could reinforce MLCVE with an independent	Create independent TA/M/E Unit under the responsibiltiy of Ministere du Logement

Components of Resettlement Action Plan	Phases of the project		Responsible Implementing Institution:	Specific Responsibilites	Period	Observations	Recommended Actions for and committments to be made by CI Government
			and Homologue	process and performance	March 31, 1999 and one month Oct 1 - 31, 1999	consultant who would carry out monitoring/evaluation independently but coordinating with MLCVE different units. BNETD wants this additional capacity but it is important that the Ministry receives TA.	
Commission Tripartite	X	X	PAPs, les Maires (4), the four communities and representatives from PMU, Comite de Suivi and Cinergy	Information exchange and concertation	For the duration of the project	Not clear if all members of the Commission attend all meetings but at least members from Ministry of Housing, BNETD, PMU meet twice a week, to coordinate and discuss progress of different activities.	
4. Consultation/participation Process							
Information to PAPs	X	X	Cinergy, BNETD	Information about project	From the onset of the project until resp. was trasferred to PMU and ONG	Several meetings have been held by local authorities, Cinergy, UMIC, APACHE, MLCVE, BNETD, PMU and ONG with the affected populations in order to inform them about different project activities.	
PAP/Project Consultation/Participation Process		X	PMU and ONG: Caritas	Ensure two-way info flow, awareness and PAP involvement	For the duration of the implementation phase, (contract)	Consultation is mainly dominated by compensation negotiations and PAP participation in other activities is rather limited.	
5. Implementation Activities							
Preparation of new sites		X	Contractors and BNETD, MLCVE	Obtain and prepare sites, ground, water, sewage, electricity, houses	November - December, 1998	Both sites have been filled and levelled. Williamsville contractor has signed contract and the works are scheduled to be completed by end November, 1998. For Adjame the bids are ready to go out and the works are scheduled to be completed about one month later than at Williamsville.	1. Review possibility of extending compensation to owners of wooden houses since these houses may not be worth trying to put up a second time. 2. Review individual electricity connecting costs.
Compensation packages		X	Cellule de Projet (PMU) assited by ONG	Define, prepare, negotiate and distribute compensation for each chef de famille	October, 1998 - March, 1999	All concerned chef de famille affected by either relocation from living under transmission lines or compensation for loss of income in connection with	See above for necessary actions to be taken by Comite de Pilotage concerning compensation/resettlement and budget for these components:

Components of Resettlement Action Plan	Phases of the project		Responsible Implementing Institution:	Specific Responsibilites	Period	Observations	Recommended Actions for and committments to be made by CI Government
						transmission line construction have signed their compensation contracts. Company and villagers who lost coconut plantations in connection with gas pipeline construction have received cash compensation. Remaining issues: (i) Negotiation and confirmation of cash compensation and relocation of fishermen families at Azito village affected by gas pipeline (ii) Review compensation to Azito village for loss of 12 has to plant site (iii) Review cash compensation packages	i) Cash compensation and relocation of fishermen families at Azito village affected by gas pipeline; (ii) Review of compensation to Azito village for loss of 12 has to plant site; and (iii) Review of individual cash compensation packages.
Transfer and reinstallation		X	Cellule de Projet (PMU) assisted by ONG	Assist in finding new lodging for tenants and temporary for owners until sites are ready, arrange transport if necessary and assist with reinstallation at new sites eventually	September 1998 - March 1999	Tenants receive cash compensation to also cover transfer to new lodgings, specially vulnerable PAP may need additional assistance. Important also for especially vulnerable PAPs when time to relocate to the new sites. PAPs are required to pay for individual electricity connection to general site systems, follow up necessary.	
Income restoration		X	Cellule de Projet assisted by ONG, Independent M/E Unit	Follow up on each chef de famille to assure restored family economy and living standards	October, 1998 - March, 1999. Final evaluation in October 1999.	Those chef de famille that are employed will be able to maintain their present occupations after move, even have shorter distance to work site (ONG has followed up). Merchants economic recuperation will need specific monitoring and perhaps also promotion.	
6. Monitoring and Evaluation							
Continous follow-up of process and performance		X	Comite de Suivi, Independent M/E Unit	Monitor the information and participation process, monitor and evaluate resettlement and compensation process and results. Provide TA to PMU.	August 1998 - March, 1999. October, 1999	BNETD is responsible for implementation and therefore an independent M/E unit is necessary.	Ensure government support for TA/M/E Unit.
Post installation evaluation		X	M/E Unit	Evaluate compensation and installation results at end of resettlement operation	End of March, 1999	It is important to make an evaluation at the end of the process in order to install any mitigative mechanisms that may be necessary before the operation is considered completed.	

Components of Resettlement Action Plan	Phases of the project		Responsible Implementing Institution:	Specific Responsibilites	Period	Observations	Recommended Actions for and committments to be made by CI Government
Mid-term evaluation		X	M/E Unit	A follow-up evaluation of PAP living standards	October, 1999	Some aspects of process and performance are not possible to evaluate finally until after som time lapse, therefore an evaluation after about six month after completion of the compensation/re-installation is incremental to finally assess project impact on PAPs living standard.	

Annex 8

Côte d'Ivoire: The Azito Power Project
Project Processing Budget and Schedule

A. Project Budget (US$000)	Planned (At final PCD stage)	Actual

B. Project Schedule	Planned	Actual
PAD decision meeting	09/22/98	9/22/98
OC review meeting	10/27/98	10/27/98
Board date	12/10/98	

Time taken to prepare the project (months)		
First Bank mission (identification)	_/_/19	_/_/19
Appraisal mission departure	07/23/98	7/23/98
Negotiations	_/_/19	_/_/19
Planned Date of Effectiveness	12/20/98	_/_/19

Prepared by:

Preparation assistance: IFC Appraisal

Bank staff who worked on the project included:

Name	Specialty
Said R. Mikhail	Power Engineer
Farida Mazhar	Project Finance and Guarantee Specialist
Nourredine Bouzaher	Energy Economist
Elisabeth Pendleton	Counsel
Iain T. Christie	Private Sector Lead Specialist
Jean-Roger Mercier	Environmental Specialist
Cyprian Fisiy	Social Scientist
Colleen de Freitas	Operations Analyst

Annex 9

Côte d'Ivoire: The Azito Power Project
Documents in the Project File*

A. Project Implementation Plan

B. Bank Group Staff Assessments

Côte d'Ivoire- Azito - Decision Book, IFC, May 1998.

C. Other

Etude Relative à l'Organisation et à la Gestion du Secteur de l'Electricité en Côte d'Ivoire - Rapport Etape I - Analyse de la Situation Actuelle et Conclusions Ashurst Morris Crisp (Octobre 1996).

Etude Relative à l'Organisation et à la Gestion du Secteur de l'Electricité en Côte d'Ivoire - Rapport Etape II -Présentation et Analyse des Options de Réforme Institutionnelle- Recommandations Ashurst Morris Crisp (December 1996).

The Azito Power Station - Bank's Engineer's Report - Preliminary - Mertz and McLellan Consulting Engineers (May 1998).

Plan de Déplacement et de Réinstallation des Personnes Affectées par la Construction de la Centrale Azito et son Réseau de Transport Associé, Bureau National d'Etudes Techniques et de Développement (April 1998).

Etudes d'Impact Environnemental de la Sous-Station d'Azito et des Lignes de Transmission Azito-Abobo, Environmental Resources Management (April 1998).

*Including electronic files. *Azito Cash-flows*, September 1998

Annex 10

Statement of Loans and Credits
Status of Bank Group Operations in Côte d'Ivoire
IBRD Loans and IDA Credits in the Operations Portfolio

Project ID	Loan or Credit No.	Fiscal Year	Borrower		Purpose	Original Amount in US$ Millions				Difference Between expected and actual disbursements a/	
						IBRD	IDA	Cancellations	Undisbursed	Orig	Frm Rev'd
Number of Closed Loans/Credits: 115											
Active Loans											
CI-PE-37588	IDA31170	1999	GOVERNMENT		AGRIC. SVCS. II	0.00	50.00	0.00	49.21	0.00	0.00
CI-PE-1177	IDA31000	1998	GOVERNMENT	I	TRANSP SECTOR ADJ	0.00	180.00	0.00	173.24	0.00	0.00
CI-PE-35655	IDA30790	1998	GOVERNMENT		EDUC. & TRG SUPPORT	0.00	53.30	0.00	52.53	0.00	0.00
CI-PE-43736	IDA31040	1998	GOVERNMENT		PSD TA	0.00	12.00	0.00	11.81	0.00	0.00
CI-PE-44912	IDAN0360	1998			URBAN LAND MGMT	0.00	10.00	0.00	9.18	-.50	0.00
CI-PE-1194	IDAN0220	1997	GOVERNMENT		RURAL LAND (PNGTER)	0.00	41.00	0.00	36.30	-.29	0.00
CI-PE-1212	IDA28430	1996	GOVERNMENT		PRIVATE SECTOR DEVEL	0.00	180.00	0.00	0.00	-84.16	8.12
CI-PE-1214	IDA28930	1996	GOVERNMENT		INTEG HLTH SERV DEVP	0.00	40.00	0.00	34.91	13.26	0.00
CI-PE-40115	IDA27860	1996	GOVERNMENT		RAILWAYS REHAB	0.00	20.00	0.00	6.78	7.42	0.00
CI-PE-1184	IDA27540	1995	GOVERNMENT		PRIVATE ELECTRICITY	0.00	79.66	0.00	28.15	28.39	0.00
CI-PE-37575	IDA27040	1995	GOVERNMENT		MUNICIPAL SUPPORT	0.00	40.00	0.00	27.65	26.54	0.00
CI-PE-37581	IDA27490	1995	GOVERNMENT		EXPORT PROMOTION AND	0.00	5.83	0.00	3.22	1.27	.84
CI-PE-1186	IDA26370	1994	GOVERNMENT		LABOR FORCE TRAINING	0.00	17.00	0.00	11.53	10.87	4.01
CI-PE-1210	IDA25970	1994	GOVERNMENT		RURAL SAVINGS	0.00	2.20	0.00	1.08	.42	0.00
CI-PE-1187	IDA25030	1993	GOVERNMENT		ECN MGMT TA	0.00	17.00	0.00	1.31	-.26	0.00
CI-PE-1207	IDA23630	1992	GOVERNMENT		PRIVATIZATION SUPPOR	0.00	15.00	0.00	3.19	2.95	1.18
Total						0.00	762.99	0.00	450.09	5.91	14.15

	Active Loans	Closed Loans	Total
Total Disbursed (IBRD and IDA):	277.21	3,454.60	3,731.81
of which has been repaid:	0.00	1,523.45	1,523.45
Total now held by IBRD and IDA:	762.99	1,924.22	2,687.21
Amount sold :	0.00	5.10	5.10
Of which repaid :	0.00	5.10	5.10
Total Undisbursed :	450.09	0.00	450.09

a. Intended disbursements to date minus actual disbursements to date as projected at appraisal.
b. Rating of 1-4: see OD 13.05. Annex D2. Preparation of Implementation Summary (Form 590). Following the FY94 Annual Review of Portfolio performance (ARPP), a letter based system will be used (HS = highly Satisfactory, S = satisfactory, U = unsatisfactory, HU = highly unsatisfactory): see proposed Improvements in Project and Portfolio Performance Rating Methodology (SecM94-901), August 23, 1994.
Note: Disbursement data is updated at the end of the first week of the month.

Côte d'Ivoire
STATEMENT OF IFC's
Committed and Disbursed Portfolio
As of 31-Aug-98
(In US Dollar Millions)

		Committed				Disbursed			
		IFC				IFC			
FY Approval	**Company**	**Loan**	**Equity**	**Quasi**	**Partic**	**Loan**	**Equity**	**Quasi**	**Partic**
1977/86	Gonfreville	0.00	.42	0.00	0.00	0.00	.42	0.00	0.00
1987/90	SIALIM	1.59	0.00	0.00	0.00	1.59	0.00	0.00	0.00
1987/93/96	COSMIVOIRE	2.99	.17	2.18	0.00	2.99	.17	2.18	0.00
1988	IPS (IVC)	0.00	.83	0.00	0.00	0.00	.83	0.00	0.00
1989/93	AEF Pechazur	.15	0.00	0.00	0.00	.15	0.00	0.00	0.00
1993/95/97/98	Block CI-11	0.00	48.70	0.00	0.00	0.00	44.54	0.00	0.00
1994	AEF Multiproduit	.16	0.00	0.00	0.00	.16	0.00	0.00	0.00
1994/96	BACI	3.03	0.00	0.00	0.00	3.03	0.00	0.00	0.00
1995	CIPREL	12.39	.96	0.00	0.00	12.39	.96	0.00	0.00
1995	FTG	1.23	0.00	0.00	0.00	1.23	0.00	0.00	0.00
1995	Laborex	.62	0.00	0.00	0.00	.62	0.00	0.00	0.00
1995	Texicodi	.83	0.00	0.00	0.00	.83	0.00	0.00	0.00
1996	AEF Petro Ivoire	0.00	0.00	.75	0.00	0.00	0.00	.75	0.00
1996	Bereby Finances	0.00	3.05	0.00	0.00	0.00	3.05	0.00	0.00
1996	Multi-Produits	0.00	.40	0.00	0.00	0.00	.35	0.00	0.00
1996	UA-IARD	0.00	.31	0.00	0.00	0.00	.31	0.00	0.00
Total Portfolio:		22.99	54.84	2.93	0.00	22.99	50.63	2.93	0.00

Approvals Pending Commitment

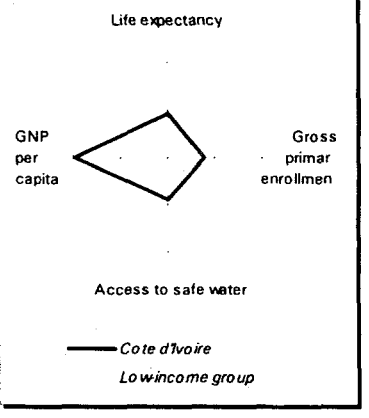
		Loan	**Equity**	**Quasi**	**Partic**
1998	AEF DROP-IVOIRE	1.26	0.00	0.00	0.00
1998	AZITO	35.00	0.00	8.50	35.00
1996	BOA-CI	0.00	.14	.11	0.00
1998	FOXTROT	30.00	10.00	0.00	40.00
1997	NOVOTEL-ABIDJAN	2.68	.54	0.00	0.00
1998	SOCOPRIM S.A.	29.84	0.00	4.97	0.00
1997	TROPICAL RUBBER	3.43	0.00	0.00	0.00
Total Pending Commitment:		102.21	10.68	13.58	75.00

Cote d'Ivoire at a glance

9/9/98

POVERTY and SOCIAL	Côte d'Ivoire	Sub-Saharan Africa	Low-income
1997			
Population, mid-year *(millions)*	14.7	614	2,048
GNP per capita *(Atlas method, US$)*	690	500	350
GNP *(Atlas method, US$ billions)*	10.1	309	722
Average annual growth, 1991-97			
Population *(%)*	2.9	2.7	2.1
Labor force *(%)*	5.4	2.6	2.3
Most recent estimate (latest year available, 1991-97)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	51	32	28
Life expectancy at birth *(years)*	54	52	59
Infant mortality *(per 1,000 live births)*	83	90	78
Child malnutrition *(% of children under 5)*	24	..	61
Access to safe water *(% of population)*	63	44	71
Illiteracy *(% of population age 15+)*	57	43	47
Gross primary enrollment *(% of school-age population)*	70	75	91
Male	76	82	100
Female	58	67	81

Development diamond*

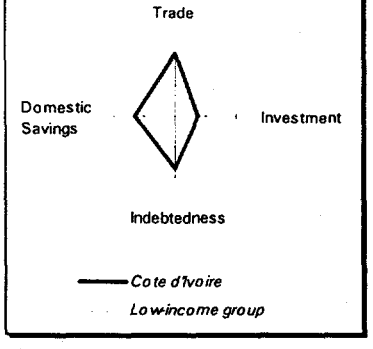


KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1976	1986	1996	1997
GDP *(US$ billions)*	4.7	9.2	10.7	10.3
Gross domestic investment/GDP	23.0	12.1	13.4	16.0
Exports of goods and services/GDP	41.7	39.5	43.9	46.6
Gross domestic savings/GDP	28.5	21.4	22.3	23.1
Gross national savings/GDP	19.5	10.0	9.1	10.9
Current account balance/GDP	-5.3	-3.8	-5.5	-5.2
Interest payments/GDP	1.5	7.5	4.4	9.2
Total debt/GDP	39.2	125.0	182.5	171.8
Total debt service/exports	11.3	35.6	29.6	27.8
Present value of debt/GDP	..	..	173.8	168.2
Present value of debt/exports	..	..	367.9	357.2

	1976-86	1987-97	1996	1997	1998-02
(average annual growth)					
GDP	0.1	1.9	6.9	6.0	5.7
GNP per capita	-4.2	-1.0	5.7	4.1	3.4
Exports of goods and services	7.7	4.4	22.4	13.4	4.4

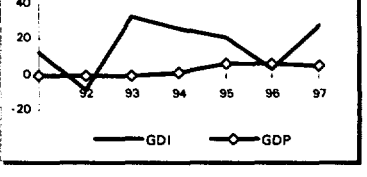
Economic ratios*



STRUCTURE of the ECONOMY

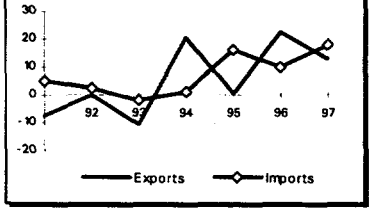
	1976	1986	1996	1997
(% of GDP)				
Agriculture	24.5	28.5	27.6	27.3
Industry	16.4	21.3	20.7	21.2
Manufacturing	9.4	17.6	17.4	17.6
Services	59.2	50.3	51.7	51.5
Private consumption	55.3	63.5	65.6	65.3
General government consumption	16.2	15.1	12.1	11.6
Imports of goods and services	36.2	30.2	35.0	39.6

Growth rates of output and investment



	1976-86	1987-97	1996	1997
(average annual growth)				
Agriculture	0.5	3.1	1.4	4.7
Industry	5.6	2.0	12.6	9.3
Manufacturing	6.8	1.3	8.6	6.5
Services	-1.5	1.2	8.4	5.3
Private consumption	-0.4	0.3	-2.6	1.7
General government consumption	-1.1	-1.5	7.1	2.0
Gross domestic investment	-11.0	6.4	3.5	28.0
Imports of goods and services	-0.7	2.4	10.0	18.4
Gross national product	-0.5	2.2	8.5	6.8

Growth rates of exports and imports (



Note: 1997 data are preliminary estimates.

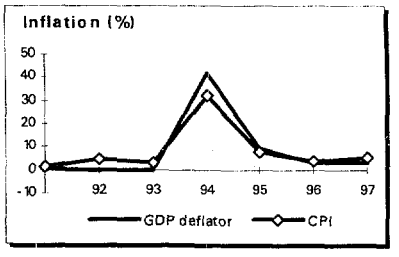
*The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

Côte d'Ivoire at a glance

Cote d'Ivoire

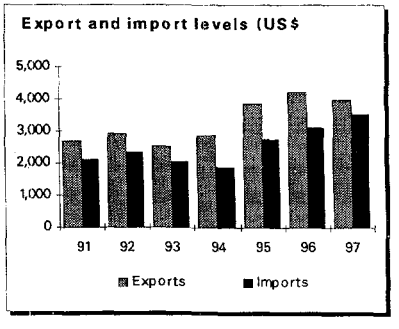
PRICES and GOVERNMENT FINANCE

	1976	1986	1996	1997
Domestic prices				
(%change)				
Consumer prices	12.1	6.8	3.5	5.2
Implicit GDP deflator	18.2	-2.0	2.7	3.2
Government finance				
(%of GDP, includes current grants)				
Current revenue	..	29.6	22.5	22.2
Current budget balance	..	1.0	2.8	3.4
Overall surplus/deficit	..	-3.8	-2.8	-2.8



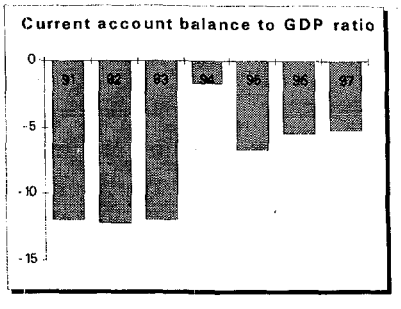
TRADE

	1976	1986	1996	1997
(US$ millions)				
Total exports (fob)	1,735	3,170	4,245	4,015
Cocoa	..	1,135	1,408	1,203
Fuel	..	..	143	168
Manufactures	..	821	1,330	1,213
Total imports (cif)	..	2,047	3,127	3,506
Food	..	416	563	604
Fuel and energy	..	322	589	471
Capital goods	..	549	734	787
Export price index *(1995=100)*	31	66	96	88
Import price index *(1995=100)*	23	48	107	99
Terms of trade *(1995=100)*	134	136	89	88



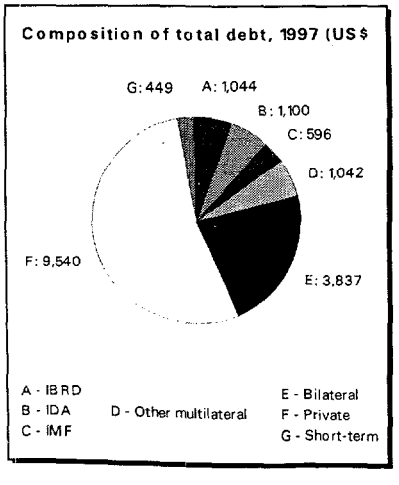
BALANCE of PAYMENTS

	1976	1986	1996	1997
(US$ millions)				
Exports of goods and services	1,970	3,678	5,014	4,788
Imports of goods and services	1,802	2,978	4,188	4,064
Resource balance	168	700	826	724
Net income	-158	-690	-916	-813
Net current transfers	-259	-356	-498	-440
Current account balance	-249	-347	-588	-528
Financing items (net)	279	376	626	498
Changes in net reserves	-30	-29	-39	31
Memo:				
Reserves including gold *(US$ millions)*	0	38	650	518
Conversion rate *(DEC, local/US$)*	239.0	346.3	511.6	583.7

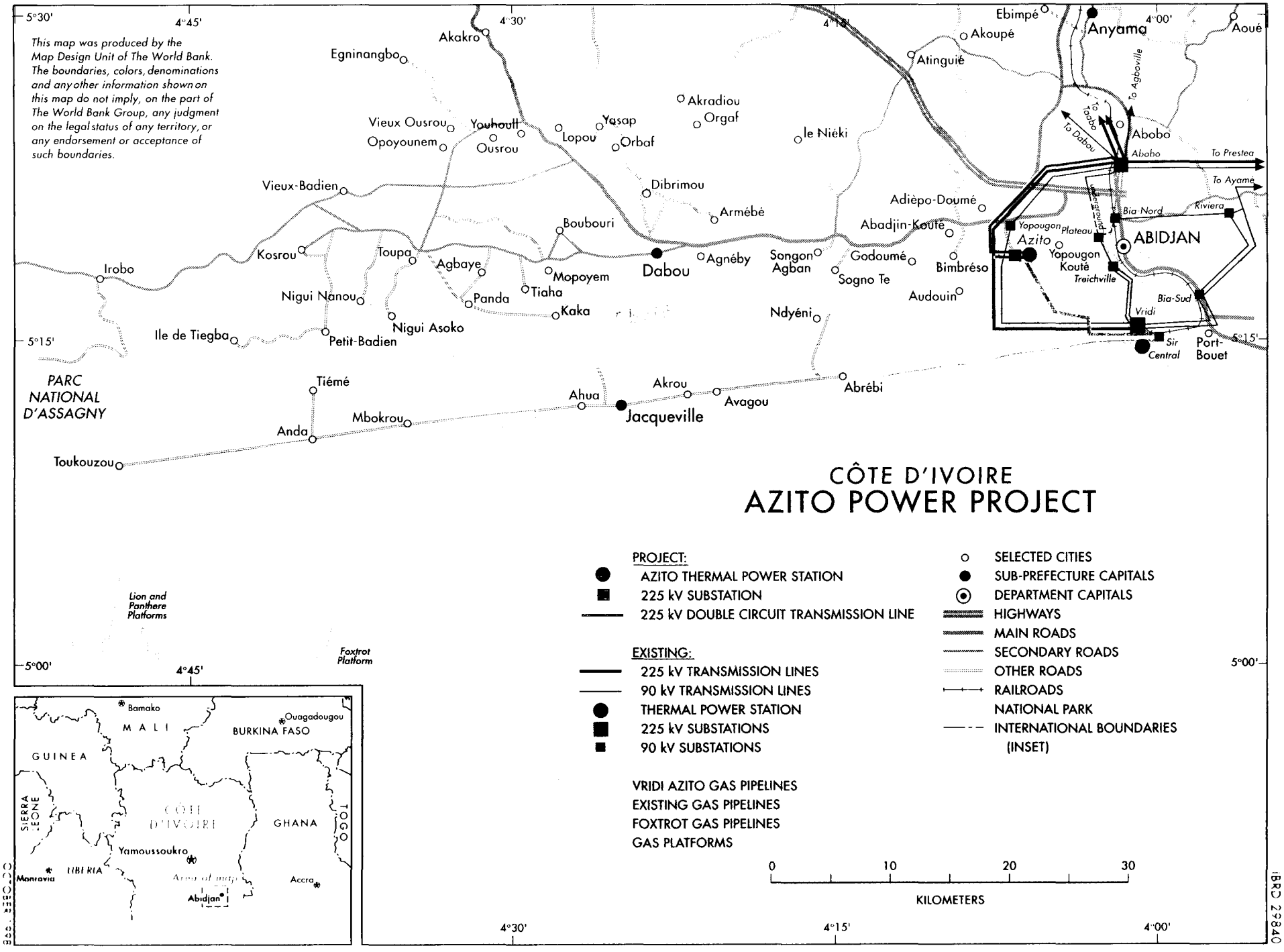


EXTERNAL DEBT and RESOURCE FLOWS

	1976	1986	1996	1997
(US$ millions)				
Total debt outstanding and disbursed	1,828	11,450	19,523	17,608
IBRD	85	1,253	1,304	1,044
IDA	3	7	1,019	1,100
Total debt service	225	1,321	1,495	1,344
IBRD	9	158	289	245
IDA	0	0	5	8
Composition of net resource flows				
Official grants	16	57	187	135
Official creditors	73	115	-45	70
Private creditors	198	-181	109	-21
Foreign direct investment	45	71	124	219
Portfolio equity	0	0	140	68
World Bank program				
Commitments	48	309	275	138
Disbursements	16	117	253	140
Principal repayments	2	57	178	158
Net flows	15	60	75	-18
Interest payments	7	101	117	95
Net transfers	8	-41	-42	-112



MAP SECTION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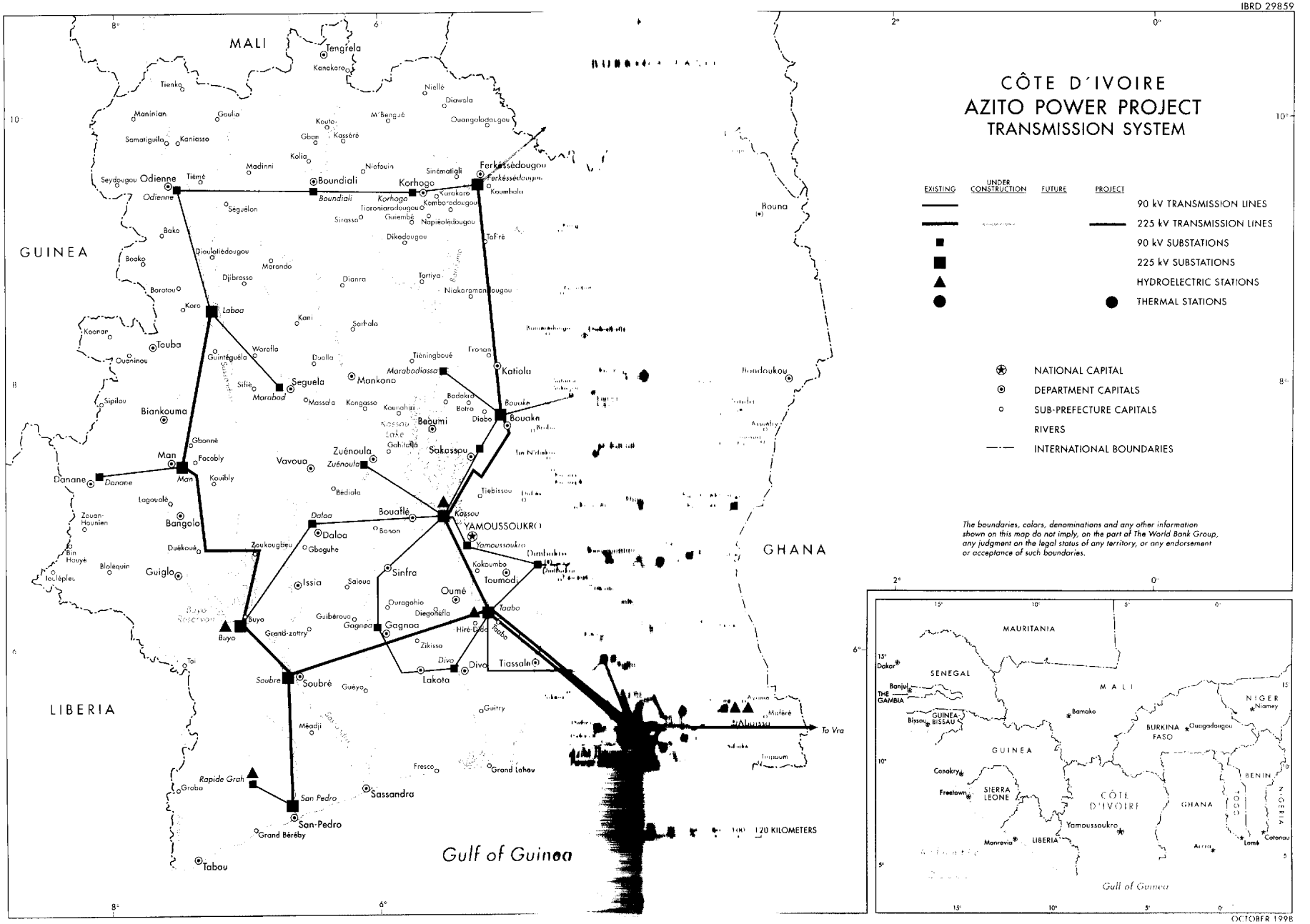
5°30'
4°45'
4°30'
4°15'
4°00'
5°15'
5°00'
Akakro
Egninangbo
Vieux Ousrou
Youhoult
Opoyounem
Ousrou
Lopou
Yasap
Orbaf
Akradiou
Orgaf
le Niéki
Ebimpé
Akoupé
Atinguié
Anyama
Aoué
To Agboville
To Taabo
To Dabou
Abobo
To Prestea
To Ayamé
Vieux-Badien
Dibrimou
Armébé
Adièpo-Doumé
Abadjin-Koute
Boubouri
Kosrou
Toupa
Agbaye
Irobo
Dabou
Agnéby
Songon Agban
Godoumé
Bimbréso
Sogno Te
Audouin
Mopoyem
Tiaha
Panda
Kaka
Nigui Nanou
Nigui Asoko
Ile de Tiegba
Petit-Badien
Ndyéni
Yopougon Plateau
Azito
Yopougon Koute
Treichville
ABIDJAN
Bia-Nord
Riviera
Bia-Sud
Vridi
Sir Central
Port-Bouet
PARC NATIONAL D'ASSAGNY
Tiémé
Anda
Mbokrou
Ahua
Jacqueville
Akrou
Avagou
Abrébi
Toukouzou
Lion and Panthere Platforms
Foxtrot Platform
CÔTE D'IVOIRE
AZITO POWER PROJECT
PROJECT:
AZITO THERMAL POWER STATION
225 kV SUBSTATION
225 kV DOUBLE CIRCUIT TRANSMISSION LINE
EXISTING:
225 kV TRANSMISSION LINES
90 kV TRANSMISSION LINES
THERMAL POWER STATION
225 kV SUBSTATIONS
90 kV SUBSTATIONS
VRIDI AZITO GAS PIPELINES
EXISTING GAS PIPELINES
FOXTROT GAS PIPELINES
GAS PLATFORMS
SELECTED CITIES
SUB-PREFECTURE CAPITALS
DEPARTMENT CAPITALS
HIGHWAYS
MAIN ROADS
SECONDARY ROADS
OTHER ROADS
RAILROADS
NATIONAL PARK
INTERNATIONAL BOUNDARIES
(INSET)
0 10 20 30
KILOMETERS
Bamako
MALI
Ouagadougou
BURKINA FASO
GUINEA
SIERRA LEONE
CÔTE D'IVOIRE
GHANA
TOGO
Yamoussoukro
LIBERIA
Monrovia
Area of map
Abidjan
Accra
IBRD 22840

IBRD 29859

CÔTE D'IVOIRE
AZITO POWER PROJECT
TRANSMISSION SYSTEM



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OCTOBER 1998