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Report No. 12116

PROJECT COMPLETION REPORT

COLOMBIA

POWER DEVELOPMENT FINANCE PROJECT (FEN)
(LOAN 2401-CO)

JUNE 30, 1993

Trade, Finance, Industry and Energy Division
Country Department III
Latin America and The Caribbean Regional Office

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ABBREVIATIONS

ISA	-	Interconexión Eléctrica S.A.
EEEB	-	Empresa de Energía Eléctrica de Bogotá
EMCALI	-	Empresas Públicas de Cali
EPM	-	Empresas Públicas de Medellín
ICEL	-	Instituto Colombiano de Energía Eléctrica
CVC	-	Corporación Autónoma Regional del Cauca
CORELCA	-	Corporación Eléctrica de la Costa Atlántica
JNT	-	Junta Nacional de Tarifas
FODEX	-	Fondo de Moneda Extranjera
FEN	-	Financiera Eléctrica Nacional
IDB	-	InterAmerican Development Bank
SAR	-	Staff Appraisal Report

CURRENCY EQUIVALENTS

Currency Unit = Colombian Peso (Col$)

Year		Year Average	Yearend
1982	US$1 =	64.1	70.3
1983		78.9	88.8
1984		100.8	113.9
1985		142.3	172.2
1986		194.3	219.0
1987		242.6	263.7
1988		299.2	335.9
1989		382.6	433.9
1990		502.3	568.7

FISCAL YEAR = CALENDAR YEAR

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THE WORLD BANK
Washington, D.C. 20433
U.S.A.

Office of Director-General
Operations Evaluation

June 30, 1993

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Colombia
Power Development Finance Project (Loan 2401-CO)

Attached is the "Project Completion Report on Colombia - Power Development Finance Project (Loan 2401-CO)" prepared by the Latin America and the Caribbean Regional Office, with the Borrower providing Part II.

The project was both ambitious and innovative: one of the first Bank operations to use the "B" loan co-financing scheme, it aimed at (i) providing external finance for completing Colombia's 1984-85 hydroelectric development program, and (ii) establishing Financiera Energetica Nacional (FEN) as a strong development banking institution to which some appraisal responsibilities might be delegated for future Bank sector lending and through which improvement in sector finances would be promoted. Whereas the first objective was accomplished partially (the project did not result in further "B" loans as expected), the second was not, due primarily to weak Government commitment during project implementation and deficient Bank supervision. In spite of recent changes in Government policy aimed at broadening FEN's role, persisting financial issues in the power sector at the time of PCR preparation made its sustainability as a development banking institution uncertain.

Accordingly, the project is rated unsatisfactory overall, its institutional impact negligible, and its sustainability uncertain. The PCR provides an extremely detailed and thorough analysis of the circumstances and performance of the project. In light of the pilot nature of this project (one of the first major financial intermediation operations in the power sector) and the significance of the issues revealed by the PCR, an audit is planned.

Attachment

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PROJECT COMPLETION REPORT

COLOMBIA
POWER DEVELOPMENT FINANCE PROJECT
(LOAN 2401-CO)

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PROJECT COMPLETION REPORT

COLOMBIA
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PREFACE

This is the Project Completion Report for the Power Development Finance Project which had two main objectives: (i) to provide the external financing required to sustain during 1984-85 high priority electricity projects that were already under construction; and (ii) to support the development of the then recently created Financiera Electrica Nacional (FEN) as a financial intermediary which would raise domestic and foreign funds to be relent to the Colombian power companies and as a development bank which would strengthen the financial management of the sector and act as a power financing strategy adviser to the Government and the sector.

This was an innovative project which broke new ground in the World Bank and which was prepared and appraised under a very tight timetable. Although the financing objectives of the project were largely accomplished with some delays, little progress was made in achieving the institutional building objectives. In order to determine and explain the reasons for this disappointing institutional performance and to reflect significant events which occurred after completion of disbursements, this report is significantly longer than the normal PCR.

This project was one of the first to use a cofinancing scheme adopted by the World Bank in December 1982 under which it would participate in loans provided by commercial banks ("B" loans) for projects financed by standard World Bank loans ("A" loans). This scheme was adopted to encourage commercial banks to continue to provide financing for developing countries at a time when they were curtailing such support. The project financing consisted of an "A" loan of US$170 million and "B" loans of US$200 million of which the Bank's share was US$28.2 million. The closing date of the "A" loan was extended by one year to December 31, 1987. The final disbursements from special accounts established in Colombia's central bank to subloans to the power companies was made on the "A" loan on December 1, 1987, and on the "B" loans in July 1988.

Preparation of this report began in January 1990. A draft was sent to the borrower, FEN, and its comments thereon, which are set forth in Part II of the report, have been reflected as appropriate in Part I. Drafts of the report were also sent to the Government and the cofinanciers, but no comments were received.

The Trade, Finance, Industry and Energy Division, Department III of the Latin American and Caribbean Regional Office (LA3TFIE) prepared parts I and III of the report based, *inter alia*, on the Staff Appraisal Report, the loan documents, records of the World Bank and the Final Evaluation Report submitted by FEN.

PROJECT COMPLETION REPORT

COLOMBIA
POWER DEVELOPMENT FINANCE PROJECT
(LOAN 2401-CO)

EVALUATION SUMMARY

Project Objectives and Description

1. Objectives. The project had two main objectives: first, to provide the external financing required to sustain during 1984-85 the scheduled pace of several high priority electricity development projects that were under construction, and in this connection to re-enlist the support of foreign commercial lenders to the power sector and to Colombia through a cofinancing package; second, to support the development of Financiera Electrica Nacional (FEN). FEN had been created in 1982 in conformance with an undertaking made by the Government in 1981 under the Guavio Hydro Power Project (Loan 2008-CO) when it was recognized that the local currency cost component of the power sector investment program could not be met entirely through self generated funds. FEN's development was to be supported in several respects: to enable it to serve as an effective channel for power sector lending projects in Colombia; to strengthen the financial management of the sector by enhancing FEN's ability to monitor the financial performance and prospects of Colombian power companies and to act as power financing strategy adviser to the Government and the sector; and to enhance FEN's image in the domestic capital market and thus help facilitate its access to future savings (paras 3.1 and 4.5).

2. Description. The project consisted of subprojects representing a two year time-slice (1984-85) of priority ongoing electricity development projects of ISA, EEEB, EPM, CVC and CORELCA, several of which were already partly financed by Bank loans. Subprojects consisted of the portion of the civil works, goods and services required for the electricity development projects during the period covered (para 3.2).

3. Financing. This project was one of the first to use a scheme adopted by the Bank in December 1982 to encourage commercial banks to continue to provide financing for developing countries at a time when they were curtailing such support. In addition to a normal Bank loan, referred to as an "A" loan under this scheme, the Bank would also participate in the commercial bank loans, referred to as "B" loans. The project financing in this case consisted of an "A" loan of US$170 million from the Bank and "B" loans of US$200 million, of which US$28.2 million was from the Bank and the balance from commercial banks. The "A" and "B" loans would finance the subloans made by FEN to finance the foreign exchange costs of the subprojects not financed from other sources (paras 3.3-3.5).

Project Design

4. The project was designed primarily as an emergency financial assistance project with an institutional component geared to strengthen the newly created FEN as a power sector development bank. The project concept was innovative and broke new ground in the Bank. It was prepared and appraised under pressure and a very tight timetable. This resulted in delays in obtaining Loan Committee authorization to negotiate and in completing the negotiations (paras 4.1-4.7). The time taken during the unusually extended Loan Committee review was needed to respond to questions raised about departures from Bank policies for financial intermediaries and to clarify whether the proposals were consistent with the Bank's policy that cost overruns are normally not eligible for Bank supplementary financing. The latter issue also contributed to the delay in completing the negotiations. Because these issues were resolved in a shorter time than was needed to complete the arrangements for commercial bank financing, there were no adverse consequences as a result of these delays (paras 4.12-4.20).

5. Both the Staff Appraisal Report (SAR) No.4771-CO and the President's Report No.P-3750-CO clearly specify the role envisaged for FEN as a power sector development bank, and the loan documents contain pertinent covenants consistent with that vision. In retrospect, however, it is clear that the Government and FEN were not as strongly committed as appeared during appraisal and negotiation to enhancing FEN's skills so that, in addition to raising funds for the power sector from domestic and foreign sources, it would be able to carry our broad responsibilities to improve power sector financial management (paras 4.8-4.10). Thus, there is no reference to this broad role in FEN's description of the project's objectives in the Final Evaluation Report which it prepared (Part II, para 2.03), and there is a disclaimer that this was one of the project's main objectives in FEN's letter commenting on a draft of this report (reproduced as translated in Part II, para 3.00).

6. It is also clear in hindsight that both the Colombian authorities and the Bank underestimated the difficulties which FEN would encounter in establishing itself to fulfill its broad monitoring and advisory role with respect to power sector finances and to serve as an intermediary to which some appraisal responsibilities might be delegated for future Bank sector lending operations. As a result, time targets set forth in various undertakings agreed during negotiations to achieve progress in these respects proved to be unrealistically short. In all these respects, the Bank underestimated the risks related to FEN's ability to fulfill its role as a development banking institution and dismissed them too blandly (paras 4.11).

7. The disbursement procedures, in combination with the reporting requirements and the failure to audit statements of expenditures, were not adequate to confirm that project financing was limited to foreign costs and that the limits on the extent of retroactive, and to a lesser extent supplemental and overrun, financing were adhered to (paras 4.21-4.25, 5.34 and 5.36). Also, the projections of the construction programs and financing requirements of the power companies for the 1984/1985 project time slice made at appraisal by the Colombian authorities and the Bank were overestimated. The slower pace of construction than forecast is the primary reason for the lag in subloan disbursements, which in amount and extent beyond December 31, 1985, were significantly greater than expected when the loan was approved and which required a one year extension of the December 31, 1986, closing date.

The final disbursement to clear the advances made from the commercial bank loans occurred in July 1988 (paras 5.2-5.7).

Implementation

8. Initially, the Bank closely monitored project execution and FEN operations. As time passed and it became increasingly plain that FEN's role in resolving the power sector's problems would be of minor importance, the Bank gave priority to efforts to prepare what became the Power Sector Adjustment Loan approved in December 1987, to that loan's subsequent supervision, and since 1990 to preparation of a possible sector loan. In this context, the attention given to supervision of this project diminished substantially well before the loan was fully disbursed. Overall, the supervision effort was ineffective (para 5.22). In addition, not only was there delay in implementation of most of the components of the project designed to strengthen the newly created FEN's capabilities, but for the most part the impact of these efforts has been insubstantial (para 5.8). The principal shortcomings were:

(a) There was a one year delay in obtaining the consulting assistance to strengthen FEN's technical capacity to evaluate loan proposals and monitor project implementation, relatively little use of the loan funds provided for this purpose, and virtually no independent appraisal activity by FEN through the end of 1990 (para 5.9).

(b) FEN encountered difficulties in designing computer systems which would serve its needs, as well as those of the power companies individually and the sector as a whole, for monitoring historical financial performance and for financial planning. The study of sector finances and the formulation of a proposed financing strategy, which FEN undertook to complete by September 1984, was submitted only in draft form in January 1986. The final report was never submitted, nor did the scheme for an annual exchange of views on power sector financing strategy ever take place as agreed in the loan documents. Instead exchanges of views took place in the context of the preparation and supervision of the Sector Adjustment Loan and subsequent activities (paras 5.10-5.12 and 9.1).

(c) Both the mobilization of domestic savings and extent of domestic lending by FEN fell well short of the appraisal projections and the covenanted targets. This was due to the deterioration in the financial situation of many of the power companies which made it difficult or impossible to obtain the intermediation of commercial banks which was required as a condition of FEN's domestic loans to power companies. That deterioration was not reasonably foreseeable at the time the project was appraised, so that neither FEN nor the Bank should be faulted for the failure to reach projected borrowing and lending levels. The responsibility for the emergence and persistence of deteriorated financial conditions in the power sector lies with the Government (paras 5.13-5.20 and 5.71).

(d) The ineffectiveness of Bank supervision is indicated by such matters as failures to:

(i) notice that the consultant who was retained, *inter alia*, to propose key financial indicators to be monitored had failed to do so and to follow up on this omission (paras 5.24-5.25);

(ii) arrange for the audit of statements of expenditures (para 5.34);

(iii) be aware of and follow up on the decline in real terms of FEN's profitability, both during supervision missions and when dealing with the issues raised by FEN's unilateral six month extension of the repayment period for project subloans (paras 5.28-5.29, 5.46 and 5.65-5.67);

(iv) continue monitoring compliance with the covenants in the Power Financing and Guaranty Agreements (paras 5.31 and 5.35); and

(v) assess critically the expectations that subloan disbursements would be completed by mid or year end 1986 (paras 5.4-5.6 and 5.35).

Activities Subsequent to Completion of Disbursements

9. Unilateral Extension of Subloan Amortization Period. When informed by FEN in July 1988 that it had unilaterally extended the subloan amortization period by six months without requesting the Bank's prior agreement, the Bank responded in a formally correct manner. It admonished FEN to comply strictly with the provisions of the loan documents in the future. Some of the supporting information for the Bank's conclusions that the extension would have no material adverse effect on FEN's finances and that FEN would continue to have adequate financial ratios is missing from the project files. It appears that the Bank's financial analysis of this issue was superficial. Based on a retrospective review of this matter, it also appears that if this extension had been analyzed adequately, the Bank would have become aware of two important issues: the decline in FEN's rate of return on equity in comparison to the rate of inflation; and the mismatch between the repayment terms of the external loans obtained under this project and of the subloans made from these sources. Had the Bank become aware of these issues, it could have suggested corrective measures (paras 5.41-5.48).

10. Temporary Exception from 7:1 Debt to Equity Limit. Since 1988, FEN has not complied with its undertakings to maintain its debt/equity ratio within the limit of 7 to 1. The ratio, as of the year end, was 7.4 in 1988, 10.0 in 1989 and 8.8 in 1990. The shortfall in required equity to comply with these covenants as of the year end, using year end exchange rates, was the equivalent of about US$6 million for 1988, US$42 million for 1989 and US$33 million for 1990. By letter dated June 20, 1989, FEN requested a temporary exception from the debt/equity limitation. FEN referred to several major foreign credits to be made available to it shortly which would cause it to

exceed the limit. It also referred to pending legislation pursuant to which FEN would receive additional capital contributions of about Col$30 billion in 1989. It stated that this would bring it back into compliance with the debt/equity limit. It concluded with a statement of its intentions to submit information by the end of 1989 in support of a request for a permanent increase in the debt limit. The Bank agreed with this request and apparently also to a further request made in June to extend the temporary exception to December 31, 1990. The first increment of equity capital to be provided to FEN under the new law was paid in by the Government in December 1990 in the amount of Col$19.76 billion, equivalent at the year end exchange rate to about US$35 million. As indicated above, this was not sufficient to bring FEN back into compliance with the covenanted debt limit. In September 1991, FEN requested comments from the Bank and the Interamerican Development Bank (IDB) on a proposed increase in its permissible debt/equity ratio to conform to much higher limits allowable under Colombian law applicable to financial institutions under which FEN now operates. As proposed, the limit would be at least 12:1 and possibly as high as about 20:1. Both the Bank and IDB are evaluating this request in the context of the role and financial risks under which FEN will be expected to operate in the future (paras 5.49-5.55).

11. Increases in FEN'S Responsibilities - 1990 and 1991. As a result of new laws and other regulatory changes, there has been a substantial increase in FEN's responsibilities in 1990-1991. FEN is now authorized to serve the entire energy sector, although its activities continue to be primarily focussed on the power sector. It may now also lend, not only for investment programs and projects, but to refinance debt service obligations in order to rationalize the functioning of the energy sector in accordance with the Government's policies. In addition, FEN is no longer subject to the requirement that credits made from domestic savings must have a bank guaranty or be rediscounted. As a result there has been a very large expansion, by about six times and predominantly in 1991, in the amount of its outstanding domestic borrowings. These, plus the substantial addition to its capital provided by the Government in December 1990, were used principally to finance debt service payments of the power companies due on loans guaranteed by the Government. The power companies need this assistance because the repayment terms of their loan financing impose financial burdens on them which are not reasonably related to their earning power, even assuming that they were efficiently operated and managed and the level and structure of their tariffs were appropriate. These developments highlight the need for FEN to provide more ambitious term transformation on a systematic and transparent basis, in order to apply effective and realistically achievable financial discipline to the performance of Colombia's power companies (paras 5.56-5.64).

12. The actions taken in 1990 to increase FEN's responsibilities are indicative of a change in the attitude of the Government, which now expects FEN to act as an effective development bank in support of government policies to improve the functioning of the power sector. FEN is to assist in the formulation of performance or management contracts which the power companies would enter into with the Government and which would detail measures to be taken by them to improve their efficiency. Fulfillment of these contracts will be supervised by the government, and continued access to FEN credits will be conditioned on compliance with these contracts. Companies owned by the national government which fail to comply with the contracts are to be subject to restructuring or liquidation (para 9.1 (iv)).

Decisions Adversely Affecting Project Implementation

13. A major weakness in the Bank's supervision was the failure to assign to this activity a staff member who was an expert on financial intermediaries and capital markets. The effectiveness of the Bank's efforts to improve FEN's institutional capability would have been greatly improved had such a staff member been made available and participated in most, if not all, of the supervision missions. It would also have been appropriate to have designated such staff member as the projects officer. This staff member would have provided an element which was missing during the implementation of the project: an expert representing the Bank who would gain the confidence and respect of FEN officials and who would have provided continuity to the Bank's efforts to encourage and when necessary prod FEN to fulfill the broad development banking role envisaged for it (para 5.70). The project's handling was also adversely affected at times during appraisal and supervision by the absence of a qualified power utility financial analyst (para 8.2).

14. On the Government's side, a major factor affecting implementation was the decision to let the real tariff levels fall after the 1985 devaluations, since it had a direct bearing on the internal financing of the utilities. This prevented FEN from taking a more active part as a financial institution, lending local currency funds to the utilities, and as a development institution capable of imposing conditions that would improve the financial and managerial position of its borrowers. These two capabilities go hand-in-hand since the conditionality cannot be successful unless a permanent relationship is established with the borrower that would make it possible for FEN to demand actions, even if politically difficult to implement for the borrower, that would make it worthwhile for the beneficiaries of FEN loans to comply. This relationship, and the role of FEN as a development institution as well, were elements lacking in the organization of the power sector in Colombia. It remains to be seen whether the efforts of the current Government to reinvigorate FEN will be successful (para 5.71).

Performance

15. Bank. The major strength demonstrated by the Bank in its handling of this project is its capacity and that of its staff to be innovative and respond promptly to the power sector's need for additional financing for ongoing projects. This was a very significant accomplishment. Despite the limited progress made in achieving the project's institution building component, and despite the shortcomings in the Bank's performance during design, appraisal and implementation of the project cited herein (para 8.2), the project was a worthwhile undertaking. There was a genuine need for an institution such as FEN with the capabilities and responsibilities which the Bank envisioned when the project was proposed, and there still is such a need. The Bank did not pursue the appraisal report vision of FEN effectively, but the opportunity to do so remains. The lessons learned in executing this project should be valuable in pointing the way to improved performance in the future (para 8.1).

16. FEN and other Colombian authorities have called attention to the very large increases in the project's debt service costs in both Colombian peso and US dollar terms over what was anticipated at appraisal. The substantial increases in debt service costs resulted from two sources: (i) the unexpected acceleration in the mid-1980s of the crawling peg adjustment of the value of

the peso in relation to the dollar including a 51% devaluation in 1985 and (ii) the unanticipated substantial devaluation of the dollar vis-a-vis the Japanese yen (¥) and other foreign currencies such as the Deutsche mark (DM) beginning in 1985, which resulted in much higher debt service costs for the "A" loan under the Bank's currency pooling system and for the yen denominated "B" loan. The Bank has been criticized because of its failure to provide solutions which would have protected the utilities and FEN against these unforeseen exchange risks. Because the possibility of a maxi-devaluation of the peso in relation to the US$, or of the US$ against other currencies, was not "likely" when the project was designed and negotiated, this criticism is inappropriate. Moreover, in the context of then prevailing circumstances, the practicability and merits of the Central Bank providing a hedge against a maxi-devaluation of the peso are questionable. It may be fair, however, to criticize the Bank for taking too long to formulate its institutional response to the problems resulting from the devaluation of the US$ subsequent to mid-1985. Consideration should be given to undertaking retrospective studies of what might have been achieved and at what cost had hedging against the devaluation of the US$ in relation to other foreign currencies been implemented for the project loans (paras 8.3-8.18).

17. FEN. The major strength shown by FEN as a result of this loan was its proved ability to mobilize financial savings in the domestic market through innovative and suitable short- and medium-range instruments (para. 5.24). Its major shortcomings were reflected in the very limited progress made in improving its technical and managerial skills to serve as a power sector development bank in such respects as the ability to evaluate loan proposals and monitor the implementation of projects for which it provides financing, and to serve as a power sector financing strategy advisor to the Government and the utilities. These shortcomings, in turn, reflect a lack of commitment to these objectives by the Government and FEN and to consequent inadequate follow through by them (paras 4.10 and 9.1).

Lessons to be Learned

18. The lessons of experience under this project that may be relevant to future Bank-financed projects include (see paras 8.19, 9.2 and 12.2-12.4):

(a) Emergency Financial Packages; New Lending Models.

(i) A special procedure could be established by the Bank for dealing with emergency financial packages under specific conditions, so that ad hoc arrangements would not have to be devised as was the case for this project.

(ii) When new lending models are being implemented, particularly as exemplified by this project when they involve an early application of a new cofinancing scheme in the success of which both the Bank and its borrowers are highly interested and when they are part of an emergency package for a client sector:

more rather than less financial analysis should be applied;

and the financial and institutional aspects should be more closely supervised, particularly if the technical component is weak. Such supervision should be entrusted to Bank staff and not delegated to consultants.

(b) Institutional Development.

When a principal objective of a project is to assist a newly created financial intermediary to serve as a development bank for a capital intensive infrastructure sector and strengthen its financial management, major responsibility for the Bank's activities during the design, appraisal and supervision stages should be assigned to a staff member who is an expert on financial intermediaries and capital markets. Key financial indicators to be monitored should be agreed during appraisal. When there are shortfalls in performance, appropriate follow up action should be taken to see that corrective measures are adopted.

(c) Projects Involving more than One Sector.

When projects involve more than one sector and the staff expertise required for the different sectors work in separate divisions, Bank management must ensure that there is adequate cooperation and coordination between or among the divisions so that staff experts who should be involved in appraisal and supervision of such projects are made available when needed. The Bank should be more agile in forming multi-disciplinary teams across division lines when needed and not attempt to compensate for organizational rigidities by using consultants.

(d) Realistic Scheduling.

When establishing dates to be specified in loan covenants for carrying out studies and accomplishing institutional improvements, be realistic in estimating the time needed and avoid setting overambitious targets.

(e) Disbursement and Reporting Requirements.

When disbursements are to be made on the basis of advances into a special account, and the subsequent actual use of the loan funds for project purposes is to be accounted for by disbursement from the special account, it is essential that the appraisal report estimate the rate of expected disbursements on both bases. Disbursement arrangements from the special account and reporting requirements should be designed so that they provide a basis for confirming that the financing was used for the intended purposes such as foreign costs, and that other limits or requirements were observed such as the amount of and time limits for retroactive financing. Staff should make sure that the Borrower arranges for the required audit of statements of expenditures (paras 4.21-4.25, 5.34 and 5.36).

(f) Leniency.

There are no advantages to be derived from showing leniency in the event of non-compliance with loan covenants. In the case of this loan this is particularly critical, especially with regard to FEN's failure to carry out various commitments designed to enhance its financial planning and advisory capacity (paras 5.10-5.12). Less leniency would have stimulated more the institutional strengthening of FEN as a development banking institution.

(g) Hedging Foreign Exchange Risk.

The Bank should reconsider its role with respect to the devastating effect that foreign exchange movements can have on the financial position of borrowers, particularly on producers of non-tradeables such as the utilities, in the absence of hedging mechanisms against this risk. The question which should be addressed is whether the Bank is doing all that it should to assist borrowers to address this issue appropriately, including provision of adequate technical assistance and advice to do so. In the case of Colombia, the role of the central bank should be reviewed in this context, since it should be able to provide advice about the costs and potential benefits of hedging and to coordinate and consolidate hedging activities on an economical and efficient basis for borrowers who desire to hedge. Until recently, the Central Bank monopolized all foreign exchange transactions as a result of the exchange control regime (Decree 444 of 1967), but this is no longer the case (see para 5.61).

(h) Extended Term Transformation.

The feasibility of extending FEN's term transformation role should be studied in collaboration with Colombian authorities so that the burden of debt service requirements on Colombian power companies is realistically, reasonably and transparently related to their earning power. This subject is discussed further in Annex II.

PROJECT COMPLETION REPORT

COLOMBIA
POWER DEVELOPMENT FINANCE PROJECT
(LOAN 2401-CO)

PART I. PROJECT REVIEW FROM BANK'S PERSPECTIVE

1. PROJECT IDENTITY

Project Name:	Power Development Finance Project
Loan Numbers:	2401-CO; B-6-CO; B-7-CO
RVP Unit:	Latin America & Caribbean Region LA3TFIE
Country:	Colombia
Sector:	Energy
Subsector:	Electric Power

2. BACKGROUND

Sector Development Objectives (At time of project appraisal)

2.1 In support of the Government's goal to insure the provision of the electricity supply required to support growth and employment, the main development objectives of the power sector were to supply at least cost the electric energy needed to facilitate growth of productive and commercial activities, and to help supply electricity to a larger sector of the population, only 54% of which had access to it. The achievement of this objective was constrained by a shrinking supply of funds from the international capital markets, and by the small size of Colombian financial markets and institutions.

Policy Context

2.2 In May 1983, the Government reviewed in detail the justification for, and the feasibility of, all new investments in the 1983-90 power investment program, taking account, for the first time, of competing demands for resources from other priority sectors, with a consequent reduction, by almost one third, of the planned capital outlays for electricity. The authorities recognized the need to manage and monitor more directly the impact of electricity development on the rest of the economy, its compatibility with overall public investment plans and the technical and financial feasibility of programs at the national and sector levels.

Bank Participation (At time of project appraisal)

2.3 Between 1950 and 1984, the Bank had made 27 loans to Colombia's power sector, totalling US$1,374 million. At the same time that this project was being appraised, the Bank was assisting with the preparation of three proposed

generation and transmission projects. Past loans had assisted the expansion of generating capacity, transmission and distribution facilities in the systems serving Bogota, Medellin, Cali, Cartagena, Bucaramanga and Manizales, including expansion of electricity distribution to low-income areas. Rural electrification had been supported under several projects. The Bank had also encouraged the creation of Interconexion Electrica, S.A. (ISA) to serve as an independent, national generation and interconnection company whose shareholders were the large municipal power utilities and the Government-owned power companies. A number of Bank loans had financed ISA's construction of large hydropower projects too big to supply any one company as well as the creation of a national electricity grid. The Bank had also been the coordinator of a technical assistance program to strengthen system planning, and the executing agency for another UNDP-financed program which would enhance the sector's management capability for the construction of large hydroelectric facilities. Additionally, in connection with Bank lending, marginal cost tariff studies had been carried out for the major markets. Overall, the Bank had been involved, for a period spanning more than three decades, in all the stages of power development in Colombia, from the planning stage through financing and construction of generation and transmission facilities, to delivery of service to the final consumer. This involvement and the previous Bank lending to Colombia had been found largely successful, and it was generally accepted in the Bank and by the Government of Colombia that it had contributed to the evolution of a stronger and more efficient power sector organization.

3. PROJECT OBJECTIVES AND DESCRIPTION

Project Objectives

3.1 The project had two main objectives. The first was to provide the external financing required to sustain during 1984-85 the scheduled construction pace of several high priority electricity development projects, and in this connection to re-enlist the support of foreign commercial lenders to the power sector and to Colombia through a co-financing package. The second was to support the development of the Financiera Electrica Nacional (FEN), the then recently established financial arm of the power sector, in several respects: (i) to enable it to serve as an effective channel for sector lending projects for power in Colombia; (ii) to strengthen the financial management of the sector by enhancing its capacity to monitor the financial performance and prospects of Colombian power companies and to act as power sector financial advisor to the Government and the sector; and (iii) and to enhance its image in the domestic capital market and thus facilitate its access to future savings.

Project Components.

3.2 The project, which had an estimated cost of US$1.6 billion at the time of the appraisal (US$898 million in foreign costs), consisted of subprojects representing a two year time-slice (1984-85) of priority ongoing electricity development investments of ISA, EEEB, EPM and CVC, several of which were already partly financed by Bank loans. Contingent inclusion of ICEL and CORELCA was also provided, subject to their preparing by November 30, 1984,

Government-endorsed investment and financing programs covering the years 1984-87, satisfactory to the Bank. The plans were prepared but not approved by the Government or the Bank. The Bank decided not to declare ICEL eligible but to allow CORELCA to participate in the expectation that subsequent to project completion its plans would be reviewed again. The project also included a program to assist FEN in strengthening its technical capability. All subprojects to be included under the project were to be part of the revised National Power Expansion Program, in the case of generation and transmission; least-cost solutions for completing the network path to the final consumer, in the case of subtransmission and distribution; or additions to plant needed to complement one or both of them. It was agreed that capital outlays for new electricity development projects would be authorized by the Government only if the project in question would be economically justified and there would be available adequate financing that would not affect negatively the existing financial obligations of the company(-ies) concerned (Guarantee Agreement, Section 3.02). Subprojects consisted of a portion of the civil works, goods and services associated with the investments, corresponding to the portion of electricity development projects executed during the period covered.

Project financing

3.3 This project was one of the first to use a scheme adopted by the Bank in December 1982 under which it would participate in cofinancing provided by commercial banks (so-called "B" loans) for projects financed by standard Bank loans (so-called "A" loans). This scheme was proposed at a time when commercial banks had become less willing to provide financing for developing countries. It was expected that even though the Bank's status as a preferred creditor would not be extended to the commercial banks, they would be more willing to provide cofinancing and do so at somewhat more attractive terms if the Bank were a participant in the cofinancing loans. There were several ways in which the Bank might participate, and in this instance it was by taking the maturities last payable.

3.4 The project financing consisted of an "A" loan of US$170 million from the Bank and "B" loans of US$200 million primarily from foreign commercial banks. One of these was a US$ denominated loan for US$175 million, for which the Midland Bank is the agent bank. The other was Yen denominated in the amount of Y5.5 billion, equivalent to US$25 million at the exchange rate then prevailing of Y220 per US$, for which the Industrial Bank of Japan is the agent bank. The Bank's share of the "B" loans, originally expected to be US$30 million, amounted to US$28.2 million as finally agreed. The "A" loan had standard country terms. It was repayable after a four year grace period in semi-annual installment over 13 years and was subject to standard variable interest rates and foreign exchange risks based on the currency pooling system. The "B" loans also had a four year grace period after which the commercial bank shares were repayable in semi-annual installments over four years. No repayments of the Bank's share of the "B" loans were due until the commercial bank shares were fully repaid. Then, the Bank's share of the US$ denominated "B" loan, including US$5 million provided by the Nordic Investment Bank, was repayable over two years, and its share of the Yen denominated "B" loan was repayable over 1 1/2 years. Interest rates on the "B" loans were also variable, either 1 5/8% over LIBOR or 1 1/2% over the US prime rate for the US$ denominated loan and 0.4% over the long term prime lending rate in Japan for the yen denominated loan.

3.5 Subloans of FEN to the utilities would finance foreign exchange costs not covered from other sources. Bank financing, including its share of the cofinancing loans, could be used to finance project costs originally expected to be financed by commercial lenders but, except for the Mesitas Hydro Power Project, could not be used to finance project cost overruns. It could also be used to finance interest during construction on existing Bank loans, in the cases of ISA, EEEB and EPM, where the Bank's normal criteria for such financing were met. The loan agreements were signed on June 27, 1984. Retroactive financing from January 1, 1983, was not to exceed US$29 million from the "A" loan and the Bank's share of the "B" loans. The "B" loans provided that they could finance only expenditures incurred or paid after January 1, 1983, subject to a limit of US$50 million for expenditures incurred and paid prior to January 1, 1984, in the case of the US$175 million loan.

Procurement

3.6 Goods and works financed under the project by the Bank Loans, including the Bank's share of the "B" loans, were to be procured under international competitive bidding, in accordance with Bank guidelines. The commercial lenders' share would follow procurement norms of the Bank, IDB, KfW, or other institutional lenders in the case of subprojects partly financed by them, or local procedures of the Government satisfactory to the Bank.

Subloans and Onlending Terms

3.7 FEN could approve subloans meeting the eligibility criteria of the project. Subloans financed under the "A" loan required prior approval by the Bank. A free-limit, however, was established for subloans which did not exceed US$4 million for any given subproject; except for the first three such loans, Bank approval of free limit subloans was required only before disbursement of Bank funds was authorized. The "B" loans could be utilized only to finance expenditures for subprojects eligible for financing pursuant to the provisions of the "A" loan agreement; essentially this meant that the subprojects had to meet the tests of eligibility described in para 3.2. To be eligible for subloans under the project or for any other new lending from FEN, the power companies would have to be current in paying their obligations under all outstanding loans from FEN. Onlending terms were to be established upon the basis of full-cost recovery by FEN. The foreign exchange risk was borne by the utilities; this was accomplished by denominating the subloans in dollars equivalent to the various currencies in which the principal of the loans to FEN from the Bank and the commercial banks would be payable, including the basket of currencies applicable under the "A" loan. Interest rates, fees and terms of the subloans were a blend of the terms of the Bank and co-financing loans, plus a 0.5% spread over the interest rate; maximum subloan term was 15 years, including a 4-year grace period.

Loan Structure

3.8 In addition to the usual Loan and Guarantee Agreements for the "A" loan, there is a Power Financing Agreement between FEN and the power companies which details their respective obligations under the project (see President's Report, para 63 for a full summary thereof). There are also separate Loan and Guarantee agreements for each of the "B" loans.

4. PROJECT DESIGN AND ORGANIZATION

Project Formulation and Timing

4.1 The project was conceived during a very critical period of Colombia's external financing evolution at a time when the Latin American debt crisis had recently emerged. Commercial sources of credit which were part of the financing plans of several large projects under way in the power sector had completely dried up, and the country was experiencing serious difficulties securing "new money" for these and other purposes. Due to this and to the need to continue implementation of ongoing projects in the power sector, the loan was designed primarily as an emergency financial assistance project, with an institutional component geared to strengthen the newly created FEN as a power sector development bank. Although there had not been a formal appraisal mission, there had been Bank advisory missions to FEN in June and November 1982. The findings of these missions, together with a positive response from Government during preliminary discussions, were considered an adequate basis for seeking management agreement to the proposed project as set forth in a combined issues/decision paper prepared in January 1983.

4.2 A post appraisal mission took place in March 1983. As work progressed, the main outline of the project remained essentially the same but significant details were changed. This included substantial increases in the loan amounts. The original proposal was for an "A" loan of US$25 million and a "B" loan of US$80 million including a possible World Bank participation of US$20 million. These were increased in two steps to the amounts finally agreed. Because of the need to clarify and refine various of the project concepts and details, an unusually long eight week period was required before Loan Committee authorization to negotiate the "A" loan was obtained in December 1983. The negotiations were also protracted, and after an initial session in Washington in January 1984 they were concluded in a second session in Colombia in February. During negotiations, the Bank reconsidered a position it had previously taken, consistent with a practice followed to promote financial discipline on the part of Bank borrowers, that the funds provided by the Bank could not be used to finance cost overruns on projects which it had financed under previous loans. Infrequent exceptions to this practice, however, were allowed when the circumstances causing the overrun were beyond the control of the borrower, the borrower and the Government had made substantial efforts to meet the costs of the overrun from their own resources, the project was still economically justified, its scope could not be reduced and no other sources of financing were available. In response to a Colombian request, the Bank concluded that these tests were met for the Mesitas project, and it agreed that FEN could utilize US$43.2 million of Bank funds and $19.7 million of commercial bank funds to finance the foreign cost overruns on the Mesitas project. This was necessary because it would otherwise not have been possible to use the financing being provided preponderantly for projects already under way, as was intended when the project was proposed.

4.3 The loan was presented to the Board for approval in March 1984, nine months later than it had been originally scheduled. The original schedule had foreseen that the post appraisal mission would have visited Colombia in February 1983, that negotiations would have taken place in April 1983, and that the loan would have received Board approval in June 1983.

Innovative project concept

4.4 The tight original schedule, the absence of a formal appraisal mission, and the long time it took for authorization to negotiate and then for negotiations to be completed are symptomatic of this loan's central characteristic: in many respects, it was breaking new ground in the Bank. At the time it was being designed, no institutional framework or tradition was available for a loan that would provide emergency financial assistance to a sector and would be filling the financial gap left by the commercial banks that were withdrawing from lending to developing countries, including Colombia, after more than a decade of liberal lending. The Bank was actively assisting in the establishment of FEN through the June and November 1982 advisory missions when the serious effect of the debt crisis on Colombia's ability to obtain external financing became apparent. Coincidentally, the Bank was considering an expansion of its cofinancing arrangements with commercial banks through a program of "A" and "B" loans. This led the Bank to propose and the Government to agree to an accelerated plan to assist FEN's establishment through participation in this program.

4.5 FEN had been created in January 1982. The need to create such an entity had been acknowledged in a commitment made by the Government in 1981 in conjunction with the Guavio Hydro Power Project (Loan No. 2008-CO) when it was recognized that the local currency cost component of the power sector investment program could not be met entirely through self generated funds. The original concept was expanded significantly by empowering the new entity to raise funds from external as well as local sources. It was intended that FEN would initially focus its efforts on mobilizing voluntary local savings to meet the power sector's requirements for medium and long-term local currency financing, while also establishing itself as a specialized institution to oversee and coordinate the sector's finances and financing strategy. Subsequently, it was expected to expand its operations into the international capital market.

4.6 It was in this context that the appraisal of this loan was undertaken under pressure and with a timetable reflecting the urgent financial needs of the ongoing projects. The nature of the project was basically considered to be a mobilization of resources effort that would be mainly associated with investments that had been already appraised by the Bank. Thus, in the combined issues/decision paper of January 1983, the Region proposed that the project would not require an appraisal report, but only an extended President's Report. This approach was not accepted by Bank management. The fact that it was proposed, however, reflects the urgency of the situation which appears to have affected other decisions; for example, the initial decision (April 1983) not to postpone the loan until a revised 1985-92 expansion program of the power sector was discussed with the government and approved by them, despite recognition that the existing 1982-87 program that had been adopted in 1981 overstated investment requirements vis-a-vis the slow-down of demand. This revision was formalized in May 1983, nevertheless, and the financial projections of the appraisal report are based on the revised scenario.

4.7 The haste and the sense of urgency reflected a real problem, since the Colombian external finance strategy was falling apart without an indication that the authorities were coming to grips with the new developments in the

capital markets, and there was a need to find complementary sources of funds for the completion of non-reversible projects, many of which had been financed by the Bank. The situation of the capital markets was viewed at the time as a temporary event. It was thought that the "B" loan component would assist the power sector and Colombia in restoring normal relations with the commercial banks, and that more co-financed projects would take place in the future as the normal way to channel commercial funds to development projects. That this never materialized is something that could not have been foreseen at the time of appraisal. A year later, Colombia and the commercial banks changed their respective strategies in such a way that Bank co-financing was no longer possible or necessary in a "B-loan" context. The new commercial bank strategy entailed relending to the country only all or most of Colombia's amortizations to commercial banks with policy endorsements by the Bank and the IMF, and a parallel financing package by the Bank and the IDB. Accordingly, there is no room in this scheme for "B loan" co-financing. In these subsequent operations, however, FEN has served as the intermediary for the substantial amounts of the funds borrowed from the commercial banks destined for the electric utilities.

FEN's Role

4.8 A central aspect of the loan was the role to be played by the newly created FEN as a development bank for the power sector. At the time of the appraisal it was thought correctly that FEN was not equipped yet for the larger role it would fulfill in this respect, in addition to tapping domestic and external capital markets to provide financing for the power companies. It was anticipated that the experience gained in implementing the project, combined with the institutional measures, technical support and assistance incorporated in it, would contribute to the development of FEN's banking, financial, analytical and policy skills so that it would be more fit to carry out its broad responsibilities to improve power sector financial management. The Bank also anticipated that FEN, with these improved skills, would be qualified to serve as borrower and intermediary for future power sector lending projects. This was a clever strategy but in fact, as pointed out below in the discussion of project implementation and results, very little was accomplished.

4.9 There are several explanations for this disappointing outcome. In reporting on the post appraisal mission, the Bank stated that, predictably, FEN's role in sector finances has caused some apprehension in ISA, and that ISA was reluctant to relinquish its role as coordinator of sector finances, even though ISA officials recognize that ISA had fallen short in fulfilling this responsibility. (Region's letter dated April 29, 1983 to the Minister of Finance and Public Credit.) The other power companies no doubt also resented and resisted erosion of their existing responsibilities and authority. This statement is not intended to imply that the power companies did not honor their obligations under the Power Financing Agreement to furnish information to FEN with respect to sub-projects and their finances. Most likely, however, FEN and the Government were aware that the power companies did not welcome the need to have FEN review and check the judgments of their technical staff, and FEN and the Government were reluctant to assert FEN's authority to do so when they recognized that the qualifications and capabilities of FEN's staff were still largely untested and unproven.

4.10 It is evident in retrospect that the Government and FEN were not as strongly committed as appeared during appraisal and loan negotiation to the enhancement of FEN's status and capability "to monitor the utilities' financial performance and prospects, and act as power financing strategy advisor to the Government and the sector." (President's Report, para 57.) Evidence of this lack of commitment appeared at the very outset of project implementation. The report of the first supervision mission in September 1984 included the following comment about FEN's organization and management: "The organization ...seems capable of carrying out the role as transfer agent without difficulty. Management does not seem to desire a more effective development role." (Report dated October 10, 1984, Annex 9, para 3). Further evidence of this lack of commitment is the lack of any reference to this broad role in FEN's description of the project objective in the Final Evaluation Report which it prepared (Part II, para. 2.03); and the statement in FEN"s letter of January 3, 1992, commenting on a draft of this report, that "it is not valid to assert that developing FEN's role as a development bank was one of the major components of the project" (Part II, Section 3.00). The latter claim ignores the stated objectives and the many significant covenants in the loan documents clearly designed to enhance FEN's capabilities and responsibilities as a development bank for the Colombian power sector. In addition, the Government's decision to let real tariff levels fall after the 1985 devaluations substantially adversely affected the finances of the utilities. This, in turn, impaired FEN's ability to condition its lending to the utilities on their achieving agreed targets for satisfactory financial performance (paras. 5.68 and 5.71). On balance, it is reasonable to conclude that the very limited progress made in achieving the broad objectives for the role of FEN, as defined in agreement with it and the government of Colombia during project preparation, is due principally to lack of effective follow-through by them. The recent (1990) restructuring by the new Government of FEN's legal organization and domain, however, holds out the prospect that this objective will now be adequately supported and implemented.

4.11 In view of the previous experience with ISA, the likelihood that there would be resistance to imposition of new centralized authority, and that for political reasons the Government would respond weakly to such resistance, could have been anticipated. (See brief discussion of ISA's history in President's Report No. P-4676-CO, for the Power Sector Adjustment Loan, paras 45-47.) Finally, it is clear in hindsight that both the Colombian authorities and the Bank underestimated the difficulties which FEN would encounter in establishing itself to fulfill its broad monitoring and advisory role with respect to power sector finances and to serve as an intermediary to which some appraisal responsibilities might be delegated for future Bank sector lending operations. As a result, time targets set in various undertakings agreed during negotiations to achieve progress in these respects proved to be unrealistically short. In all these respects, the Bank underestimated the risks related to FEN's ability to fulfill its role as a development banking institution and dismissed them too blandly. (See Staff Appraisal Report, para 4.14; President's Report, para 71.)

Changes during Loan Committee Review and Negotiations

4.12 Part of the delay in obtaining Loan Committee authorization to proceed with negotiations was due to the time needed to clarify whether the Government's intentions on national electric tariff policy as expressed in

public statements which had recently been made were compatible with existing and proposed agreements with the Bank. (See memorandum dated November 28, 1983, to Chair of Loan Committee.) The balance of the time was needed to clarify various project concepts and details.

4.13 a. Bank Policies for Financial Intermediaries. Some of the questions raised related to departures from Bank policies for financial intermediaries, including entities specializing in financing particular sectors, such as the urban and water supply and sanitation sectors in Brazil. The experience of these similar projects should have been utilized systematically to structure this project. The issues which arose involved the Region's original proposal that only sub-loans in excess of US$10 million would require prior Bank approval, and that FEN's decisions for those under this limit would be subject to review during project supervision. To conform to Bank policy, this was changed so that all "free limit" sub-loans would be reviewed prior to authorizing disbursement from the loan; and consistent with Bank practice for newly established intermediaries, the first three "free limit" sub-loans would require prior Bank approval. There was also a difference of opinion between the Region and senior management as to the extent to which it would be appropriate to delegate primary responsibility for appraisal of sub-projects to the untried FEN. This was resolved by reducing the "free limit" to US$4 million.

4.14 The Region's revised proposals for proceeding with negotiations, as set forth in its memorandum of December 14, 1983, to the acting Chair of the Loan Committee and approved by him, detailed the basis on which FEN would appraise subprojects in the 1983-87 power investment program which had an estimated cost of over US$4 million and which had not been appraised by the Bank or IDB. For such subprojects which had an estimated cost of over US$40 million, FEN would undertake their appraisal with technical assistance provided, as the Bank deemed warranted, either by consultants acceptable to the Bank and financed under the "A" loan, or through Bank staff participation in the FEN appraisal. For such subprojects which cost between US$4-40 million, the Bank, as it deemed warranted, would review FEN appraisals in the field. These proposals did not survive the negotiations. Although there is no specific record on this matter, presumably they were dropped because the Colombian authorities were interested in using the funds provided by the project predominantly, if not solely, for financing the completion of ongoing works already appraised, and in that context it was not considered necessary to define how FEN would appraise new works.

4.15 The matters described in the preceding two paragraphs have been mentioned because they illustrate two shortcomings of the Bank's work during project preparation and design. The first relates to the problems referred to in para 4.13, which might have been avoided if the Bank team working on the project had included a staff member knowledgeable about financial intermediaries and the Bank's practices and policies for such entities. Such a staff member, who ideally would also have been familiar with financial markets, would have participated in the technical assistance missions in 1982 which led to the formulation of this project and would have taken the lead on all the important aspects of the project relevant to FEN's role as a financial intermediary and its tapping of local capital markets. Instead, the Region had to rely on the employment of consultants for these tasks with only very limited assistance from the technical division responsible for industrial

finance in the form of occasional comments on draft reports sent to it. Had such a staff member been assigned to the project team, reliance on consultants could have been reduced and the effectiveness of the Bank's work during design, appraisal and supervision would have been improved. The second shortcoming relates to the divergence in understanding between the Bank and the Colombian authorities, which surprisingly had developed at this late stage of project design, as to the use of the project loans for purposes other than financing high priority ongoing works. This point is further illustrated in the discussion of the issues which arose during Loan Committee review related to cost overrun financing.

4.16 b. Exclusion of Project Cost Overrun Financing. Questions were raised whether the Region's proposals were consistent with the Bank's policy that cost overruns on projects previously financed by Bank loans are normally ineligible for supplementary Bank financing. In its response of December 14, 1983, referred to in para 4.14, the Region stated that project cost overruns would not be eligible for Bank financing under the project. The authorization to negotiate was conditioned on the Region being satisfied that the total Bank financing, under the "A" loan and the Bank's share of the "B" loan, for projects previously financed by the Bank (other than for interest during construction where the normal criteria for such financing were met) would not exceed the estimated shortfall in commercial bank financing. The Region was also requested to reassure itself that with the application of the agreed criteria for subproject eligibility set forth in the December 14 memorandum, there would be room for the US$300 million of "expenditures potentially financeable with Bank resources" referred to in that memo, or at least for the US$200 million of proposed Bank loans. This question was raised because of concern that this might not be possible if the statement in that memorandum, that only four contracts under existing Bank financed projects would be eligible for sub-loans, was correct.

4.17 In a memorandum dated December 16, 1983, to the acting chair of the Loan Committee, the Region provided an analysis of US$323 million of foreign costs which would be eligible for Bank financing under the agreed criteria. This included US$66.5 million of unfinanced foreign costs of civil works for the San Carlos and Playas projects, limited to an amount equivalent to previously anticipated external financing that did not materialize. It also included US$76.5 million of interest during construction on existing Bank loans for six projects still being implemented. The balance of US$180 million was for new subtransmission and distribution works that had not yet been initiated or appraised. This analysis covered the years 1883-87. All of the civil works costs were estimated to be incurred in 1983-85, including US$37 million for 1983, some of which may have carried over to the following year. Of the interest during construction, US$2.6 million was estimated for 1983, US$43 million for 1984-85 and US$30.9 million for 1986-87. Thus, for these two categories related to ongoing works, only US$112 million was for 1983-85 and the balance of US$31 million was for the next two years. Of the amounts estimated for new subtransmission and distribution projects, US$5 million was for 1984, US$70 million for 1985, and US$105 million was for 1986-87.

4.18 As indicated in para 4.2, when the Colombian authorities were informed during negotiations of the Bank's proposals for eligibility criteria for Bank financing and the implications this had for the use of a large amount of this financing for new projects, they requested the Bank to reconsider its

position. Apparently focussing on the 1983-85 time-slice proposed as the project period in the green cover SAR, they were concerned that so much of the Bank funds, estimated at approximately US$80 million, would have to be assigned to new projects to be initiated during 1984-87. They pointed out that this departed substantially from the original concept of the project oriented towards structuring an emergency financing program for electricity projects in progress which gave priority to continuing work on them and assuring their timely completion. To achieve the original objective, they requested the Bank to allow some use of its funds for overrun financing and to authorize a larger amount of retroactive financing, and the Bank agreed. (See Region's memorandum of January 25, 1984, to chair of Loan Committee, and memorandum to files of February 1, 1984.)

4.19 The project record indicates that when the Region made its green cover submission to the Loan Committee, it did not adequately appreciate the need to explain the exceptional circumstances which would justify supplemental Bank financing for projects which had been previously financed by the Bank and had experienced cost overruns. (See memorandum dated November 8, 1983, responding to comments that such justification was needed which were made by the Energy Department in a memorandum dated October 27, 1983, based on a review of a draft green cover appraisal report.) When this issue was raised during Loan Committee review, the Region apparently decided that it would be unnecessary to involve the Bank in any overrun financing in the expectation that the commercial banks would be willing to finance project cost overruns, including any associated retroactive financing, without limitation. Although this in fact did not prove to be the case, the expectation that the commercial banks might have been willing to do so was not unreasonable. In proposing to extend the project investment program period by two years and include a very substantial amount of new subtransmission and distribution works for Bank financing, however, the Region clearly misjudged how the Colombian authorities would react to this. In retrospect, it would have been much more appropriate for the Region to have presented the justification for supplemental Bank financing for the overruns on Mesitas project costs (see para 4.2) when questions about the utilization of Bank funds to finance cost overruns arose during Loan Committee review. In retrospect, also, it is surprising that senior Bank management and project advisors did not call this issue to the Region's attention at a much earlier stage in the project cycle.

4.20 Most if not all of the time taken to resolve this issue and other matters which arose during Loan Committee review and negotiations was needed in any case to complete the arrangements for the commercial bank financing. Accordingly, there were no serious adverse consequences as a result of these delays.

Disbursement Arrangements

4.21 A major share of the responsibility for administering the disbursement procedures to ensure that the loan proceeds were utilized for the intended purposes was assigned to FEN. Under these arrangements, the proceeds of the "A" and "B" loans were initially deposited into US dollar denominated revolving funds established by FEN in the Central Bank. In turn, disbursements from the special accounts were made for expenditures for goods and services and for interest and other charges eligible for financing under each approved subloan. Replenishment of the special accounts was made upon

receipt of withdrawal applications by FEN based on certified statements of expenditures. Documentation for these expenditures was retained by FEN and available for Bank review. These procedures applied to the major disbursement category for subloans under which 100% of the amounts disbursed by FEN was financed. The only other categories were for a small amount to be utilized by FEN directly to pay for consulting services needed to carry out a program to strengthen its technical capacity, for which 100% of foreign expenditures and 50% of local expenditures was financed; and for the amount to be paid to the Bank for the front-end fee. The Central Bank effectively paid the interest charges on the loans applicable to the amounts deposited in the special accounts until they were withdrawn to pay for FEN's disbursements on the subloans.

4.22 The Region stated, in its memorandum of December 14, 1983, that disbursements from the special accounts "will be based upon disbursement percentages applicable to the items financed under the subloan as well as receipt by FEN from the relevant subborrower of a disbursement application and full documentation of the expenditures." In the context that the financing to be provided under this project would finance foreign costs, this statement implied that the disbursement percentages would vary and that for some items, particularly for civil works, they would be less than 100%. Presumably, it was intended that, in determining eligible expenditures for financing under this project, FEN would apply the disbursement percentages specified to determine eligible foreign cost financing under previous loan agreements for projects which would receive additional financing under this loan - e.g. for the Playas Project, 56% of civil works expenditures or 100% of foreign expenditures and 100% of the ex-factory cost of locally manufactured goods for equipment. Such a procedure was not adopted. Instead, FEN was allowed to disburse subloans for 100% of all costs including civil works.

4.23 There are other respects in which it would have been advisable to reach specific understandings with FEN concerning its disbursement procedures, namely steps it would take to ensure that eligible expenditures were limited to those incurred under contracts for which the required procurement procedures were followed and that the limits specified for retroactive financing and for supplemental and overrun financing were observed. There were no such understandings.

4.24 The project record does not explain why FEN's disbursement of subloans for 100% of civil works costs was accepted as consistent with the intention that the project loans would finance foreign costs, nor why it was considered unnecessary for FEN to adopt disbursement procedures for the purposes suggested in para. 4.23. It appears, however, that the need for prior Bank approval for proposed subloans was deemed to provide an adequate opportunity to check that all these requirements were met. This approach placed undue reliance on the reliability of the estimates made as the basis for proposed subloans. In fact, the actual civil works costs for Playas were less than the estimates. Only the first disbursement application for withdrawal of funds from the special account for the subloans provided details of the expenditures to be financed, including for goods and services of the particular contract, the number of the bill and the dates and amounts of payments thereunder, and for interest payments on Bank loans the dates and the amounts of the payments. This application also specifically identified and provided the total amount of retroactive financing. Thereafter all disbursement applications simply

provided the total amounts to be withdrawn for each subloan, without any supporting details. The quarterly progress reports contained an annex listing the items for which subloan disbursements were made during the quarter (see para 5.33), but this information was not adequate to determine the extent of retroactive financing because for the most part dates of payment were not provided. This annex, however, did identify the contracts involved and thus provided a basis to check that project financing was limited to contracts which met the procurement requirements. Although reliance on prior Bank approval for subloans was acceptable to ensure that the limits on supplemental and overrun financing were observed, a report as to how this actually worked out for the individual subprojects would have been desirable as part of FEN's Final Report. In addition, it would have been preferable to design disbursement procedures for application by FEN to double check compliance with the other requirements discussed in this para. when actual subloan disbursements were made.

4.25 As elaborated further in discussing project implementation, the design of the reporting requirements for the project, combined with that for the disbursement procedures, was not adequate to confirm that project financing was limited to foreign costs and that the limits on the extent of retroactive, and to a lesser extent supplemental and overrun, financing were adhered to (see para 5.36).

5. PROJECT IMPLEMENTATION

Utilization of Project Financing

5.1 The implementation of this loan should have been relatively straightforward with respect to its primary objective, which was oriented to assist the financing of ongoing projects. The funds provided by the Bank and the co-financiers were committed within schedule. Using a comprehensive format approved by the Bank and prepared by FEN during the period between loan signing at end June 1984 and effectiveness at end September 1984, initial subloan requests were promptly prepared and submitted. The proposals were limited to the use of the subloans to meet requirements during 1984 and 1985. The amounts and uses requested corresponded closely to plans made in March 1984 to allocate the project financing among the power companies. Over a period of about three months ending mid-January 1985, five subloans were approved which fully committed all of the Bank financing and all but the US$50 million of commercial bank financing which had tentatively been allocated to ICEL (which as it turned out failed to qualify). Supplementary loans to reallocate these funds to CORELCA, CVC, EPM, and ISA were arranged in November and December 1985, within the specified deadline for submitting subloans for Bank approval. There was some delay in making these arrangements when EEEB was unable to obtain authorization from the Bogota Council to accept an additional subloan proposed by FEN.

5.2 Discussion of disbursements must distinguish between funds advanced by the Bank and the co-financiers for deposit into the special accounts at the Central Bank and payments from the special accounts for actual expenditures by the power companies on the subprojects financed by the FEN subloans. As anticipated when the loans were made, the full amount of the US$ denominated

commercial bank loans totalling US$175 million, including the Bank's share of US$25 million, was disbursed into the special account in the second half of 1984. There was a brief delay in the disbursement of the Japanese yen denominated commercial bank loans totalling Y5.5 billion, including the Bank share of Y700 million, which was paid into the special account on March 29, 1985. Disbursement of the Bank loan into the special account was geared to an initial deposit of US$50 million, made on October 1, 1984, and subsequent replenishment equal to payments made out of the special account for eligible expenditures. The subsequent replenishments were limited to the extent that the balance in the special account would not exceed the amount of the initial deposit (Loan Agreement, Schedule 4, para 3). In addition, as stated in para 4.11 of the appraisal report, after US$100 million of the Bank loan had been disbursed, recuperation of the initial deposit would begin. On this basis, the rate of disbursement was somewhat slower than anticipated at appraisal. Compared to the appraisal estimate that the US$170 million Bank loan would be fully disbursed by year end 1985, the amount then disbursed was US$159 million, or 93% of the total loan. Of the total amount then disbursed, however, US$48 million was held in the special account as advances. No additional disbursements were made in 1986. The remaining US$11 million was disbursed in two installments in February and April 1987. The final payment of US$5.3 million represented a final advance to the special account requested by FEN to facilitate its utilization for disbursements on subloans. (Part III, Table 3.1 and page 27, Evaluation Final de la Ejecucion del Contrato del Emprestito FEN-BIRF (2401) - Banca Comercial, prepared by FEN, hereafter referred to as FEN's Final Report).

5.3 Disbursement of the subloans to the utilities to finance actual expenditures on subprojects occurred at a much slower pace than the rate at which disbursements were made into the special accounts (Part III, Table 3.2 and FEN's Final Report, Cuadro No. 2). Measured on this basis, by year end 1985, only US$111 million, or 65%, of the Bank's US$170 million "A" loan, and only US$270 million, or 73% of the total US$370 million of loan funds provided by the Bank and the commercial banks, had been so utilized. By year end 1986, US$154 million, or 90%, of the "A" loan, and US$334 million, or 90%, of the total loans were utilized. By year end 1987, all of the "A" loan and all but US$800,000 of the commercial bank loans had been utilized. The last disbursement of US$5.0 million to EPM, on subloans financed by the "A" loan, was made on December 1, 1987 (FEN's Quarterly Report for the fourth quarter of 1987). The Bank's US$28.2 million share of the commercial bank loans was fully disbursed on subloans by September 30, 1985. CVC was the only one of the subborrowers to use its portion of the allocated funds by the end of 1985. Each of the other four power companies shared in the US$64 million of subloan disbursements made in 1986 and the US$36 million made in 1987. The final disbursements to clear the advances made from the US$ denominated commercial bank loans, in the amounts of US$300,000 to EPM and US$500,000 to CORELCA, were made in April and July 1988, respectively (FEN's Final Report, page 30).

5.4 Estimates of the rate at which subloan disbursements would be made are not presented in the appraisal report, and apparently none were ever made. This was an omission of an essential part of the appraisal. Implicitly, because the final date for submitting subloan applications was December 31, 1985, and the closing date for the Bank loan was set at December 31, 1986, some delay was anticipated between the advance of funds to the special accounts and their utilization for subloans. Under the procedure for

recuperation of the advances to the special account after US$100 million of the "A" loan had been disbursed, subsequent disbursements were to be made only after and to the extent that the Bank was satisfied that all amounts remaining on deposit in the special account had been or would be utilized in making payments for eligible expenditures (Loan Agreement, Schedule 4, para 5). Accordingly, to accomplish full disbursement of the "A" loan by the end of 1985, it is implicit that it was expected that the amount of subloan disbursements then outstanding would be minor. Another relevant point is the provision in the subloan agreements, approved by the Bank, which allowed 20 months from the date thereof as the period for completing disbursements thereunder. For the first five subloan agreements covering all but US$50 million of the project loan funds, this required complete disbursements of the subloans between June and September 1986; for the remaining four subloans, which did not involve the "A" loan, this required complete disbursement by March 1987. In fact, only CVC and EEEB met these deadlines. On balance, when the project loans were made, it is unlikely that it was expected that: (i) at year end 1985 there would be as much as US$59 million, or 35% of the US$170 million "A" loan, plus US$31 million, or 16% of the US$200 million of "B" loans remaining to be disbursed on subloans; and (ii) it would take another 12 months after 1986, or even more in the case of the "B" loans, to complete the disbursement of the final 10% of the loans.

5.5 The Bank did not become aware of the need for an extension of the closing date until late in 1986 when, by letter dated October 29, 1986, FEN requested an extension to December 31, 1987. Prior to that, the October 1985 and August 1986 supervision missions reported that disbursements would be completed by mid or end 1986, respectively. The October 1985 report attributed the disbursement delays to delays in implementing some of the subprojects and neither report reflected any serious problems in this connection. Considering the amounts remaining to be disbursed on subloans and the pace at which subloan disbursements had been occurring as of the time of the October 1985 mission, the target date of mid 1986 for completing disbursements reported by it should have been subject to more critical assessment. This goal then required average subloan disbursements of US$50 million for three subsequent quarters, compared to the US$22 million rate for the two previous quarters. In addition, EPM'S relatively low utilization rate of subloans should have been noticed (see para 5.35) and resulted in questions which also would have raised doubts about the likelihood of completing disbursements by mid-1986.

5.6 As of the August 1986 mission, average disbursements of US$25 million for two subsequent quarters were required to complete disbursements by year end, a rate that might well have been deemed reasonable in comparison to the rates attained since the first quarter of 1985. Beginning with the quarter ending September 30 1986, however, there was a reduction in the level and a much more erratic pattern of subloan disbursement than previously prevailed. This should not necessarily have been a surprise, since it appears that the August 1986 supervision mission also overlooked an opportunity to suggest that further analysis was needed on this subject. That mission's report included a statement of subloan utilization as of June 30, 1986, which showed that EPM had made least use of its subloans: only US$24 million, or 40%, of the US$61 million allocated to it had been disbursed, compared to at least 90% of the subloans to the other four power companies. (Mission report dated September 16, 1986, Section 1, para 4.) This disparity should have led the mission to

inquire into the reasons why EPM was making such slow utilization of its subloans, and to suggest that FEN should ascertain from EPM when the remaining balance of US$37 million would be claimed and make similar inquiries of the other power companies with unclaimed balances as of that time. Had this been done, the mission might not have concluded so confidently that: "Loan disbursements are proceeding satisfactorily. FEN is making arrangements so that by year end there will not be any balance pending disbursement." (Ibid., para 5)

5.7 The reasons cited by FEN to explain the delays in subloan disbursements were documentation problems experienced by the utilities in their payments to contractors and insufficient local currency funds to execute subprojects at the pace originally planned. It is also relevant to note that material amounts of subloan disbursements to finance interest payments during construction extended into 1986 and 1987. This was accomplished after the reallocation to this category of amounts designated in the original subloan applications to finance civil works and equipment expenditures and of amounts included therein to be specified later. This need to complete the disbursement of the subloans through extended financing of interest during construction, is evidence, in addition to the disbursements made for expenditures incurred in 1986 and 1987 for civil works and equipment, that the projections of the construction programs and financing requirements of the power companies for the 1984/1985 project time slice made at appraisal by the Colombian authorities and the Bank were overestimated. The slower pace of construction than forecast is the primary reason for the lag in subloan disbursements, which in amount and extent beyond December 31, 1985, were significantly greater than expected when the loan was approved. If, however, judgment is limited to the lag of about 12 months beyond the original closing date, December 31, 1986, which involved only about 10% of project financing, the lag may be regarded as of minor importance.

Strengthening of FEN as Power Sector Development Bank

5.8 Implementation of most of the components of the project designed to strengthen the newly created FEN's capabilities was delayed, and for the most part the impact of these efforts has been insubstantial.

5.9 a. Improvement of Project Analysis and Monitoring Capability. FEN was about one year late in obtaining the consulting assistance provided under the project to strengthen its technical capacity, including a study of its technical staffing requirements to evaluate loan proposals and to monitor project implementation. The consultant was retained in July 1985 rather than by June 30, 1984, and the study was completed in September 1985 instead of by December 31, 1984, as agreed (Loan Agreement, Section 3.01). The Bank reviewed the study report promptly and endorsed its recommendations. The additional technical staff recommended to meet FEN's immediate requirements, two well qualified power engineers, was not hired until 1986, rather than 1985 as contemplated when the loan was made. Other organizational recommendations contained in the report were implemented. Only about US$12,000 of the US$80,000 provided under the Bank loan to finance this activity was utilized. In this connection, it is relevant to note that all subloans under the project were for ongoing projects, and FEN never used the authority it had under the project to appraise independently subprojects for which its loan would not exceed US$4 million (free-limit subloans; see para 3.7). In addition, during

the project implementation period (through 1987) and subsequently, it appears that FEN has done very little if any independent appraisal work with respect to loans by FEN to the power companies from local or other external sources. Instead, FEN's judgments concerning these loans have been based primarily, if not exclusively, on evaluation reports prepared by its borrowers. The one exception has been a US$80 million loan from IDB for electricity loss reductions made in 1987, under which FEN is to evaluate subprojects submitted by the power companies applying criteria which meet the appraisal standards of IDB. Through year end 1990, however, only US$3.3 million of disbursements had been made under this loan.

5.10 b. Enhancement of Financial Planning and Advisory Capacity. A second set of measures to improve FEN's technical capacity included an informal undertaking to complete an effort already begun, using FEN's own resources, to design FEN's operating procedures, determine its computer requirements and install computer facilities compatible with those of the power companies as soon as possible. The objective was to meet FEN's requirements, as well as those of the power companies individually and the sector as a whole, for monitoring historical financial performance and preparing projected financial statements needed for financial planning (SAR, para 2.05). The work on this second undertaking was carried out with the assistance of consultants who were also retained by FEN, using its own resources, simultaneously to carry out a study on sector finances and formulate a proposed financing strategy considering alternative scenarios. FEN was formally committed under the project to complete this study by September 15, 1984, and promptly thereafter discuss it with the Government, ISA and the Bank. Subsequent to the first exchange of views based on this study, there were to be similar annual discussions of the adequacy of the existing financing strategy for the power sector and the necessary revisions thereto, not later than August 31 in each year beginning in 1985 (Loan Agreement, Section 4.13 and Guarantee Agreement, Section 3,05) . ISA agreed to cooperate with FEN fully and actively so that FEN could fulfill its obligations to carry out the study, and to participate in the annual exchanges of views (Power Financing Agreement, Section 5.01). In related undertakings, ISA agreed to prepare by April 30 of each year, and the Government agreed to review and furnish to the Bank for its comments by September 30 of each year, a study on the updated electricity demand growth projections and the related power investment program (Power Financing Agreement, Section 5.03, and Guarantee Agreement, Section 3.13). These were to serve as inputs to the annual review of sector financing strategy.

5.11 Difficulties which should have been foreseen were encountered in designing and installing computer facilities which would meet FEN's requirements and be compatible with those of the power companies. Since a uniform system of accounts had not been prescribed, the power utilities did not keep their accounts and report their results on a comparable basis. The subsidiaries of ICEL and CORELCA had poor accounting systems, and there were long delays in obtaining reliable data from them. The Bank was well aware of the difficulties ISA experienced in providing consolidated financial statements for the sector. Moreover, the expectation that the power financing study would be completed by September 15, 1984, was unrealistically short, as indicated in para 4.11. The consultants delivered a draft of the report to FEN on August 15, 1985. After extensive review within Colombia, the draft was forwarded to the Bank on January 15, 1986. The Bank responded on February 5, 1986, in a letter which contained extensive and detailed comments, and

extended the deadline for submitting the revised and final report to September 15, 1986. The Bank followed up in April and September 1986. In a telex dated September 24, 1986, FEN informed the Bank that the revision of the study was being prepared by a special working group established by the Minister of Mines and Energy, and it proposed that this revision be presented to a forthcoming preparatory mission from the Bank for a proposed sector loan as the study referred to in Section 4.13 of the Loan Agreement. In response, the Bank agreed that for 1986 the review of power sector finances would be accomplished during appraisal of the sector loan.

5.12 The scheme for an annual exchange of views among the Government, FEN, ISA and the Bank, described in para 5.10, has not been carried out as such. Instead, the Bank's supervision of the FEN loan merged with efforts to prepare the Power Sector Adjustment Loan (Loan No. 2889 CO) approved in December 1987. Exchanges of views between the Bank and Colombian authorities have been carried out in the context of the preparation and supervision of the Sector loan and subsequent power sector and project preparation activities. FEN has not played the leading role envisaged for it under the project as power sector financing strategy advisor to the Government and the utilities.

5.13 c. Mobilization of Domestic Savings. The project included two sets of measures concerning FEN's mobilization of local savings to be relent to the power companies. First, in order to have a better match between the maturities of the securities issued to raise funds from the domestic capital market and those of the local currency loans made to the power companies, it was agreed that, by December 31, 1984, FEN would prepare a plan of action acceptable to the Government and the Bank to encourage private investment in medium and long term obligations issued by FEN, and that the Government would take all actions necessary to enable FEN promptly to put that plan into effect (Loan Agreement, Section 4.11, and Guarantee Agreement, Section 3.03). Second, in order to ensure that FEN raised an appropriate share of the incremental resources expected to be available in the domestic capital market, annual targets of the minimum amount of funds FEN would raise from local investors were agreed for each of the years 1984 through 1987; these targets were to be reviewed and updated, as necessary, by agreement among FEN, the Government and the Bank as part of an annual review of FEN's borrowing and lending operations which would take into account the power sector's financing requirements (Loan Agreement, Section 4.12, and Guarantee Agreement, Section 3.04).

5.14 The appraisal report recognized that, given the strong orientation of Colombia investors toward short term paper, it would take time to attract medium and long term funds. It also recognized the practical difficulties involved in extending maturities, such as the lack (then) of a free market index of short term interest rates which would be necessary if term bonds with interest rates adjustable quarterly based on an index were to be acceptable. The fact that tax regulations were unfavorable to the issuance of medium and long term paper was another problem which the report mentioned would have to be resolved (SAR, paras 2.11-2.16). It is surprising, therefore, that a target date as early as December 31, 1984, was set for submitting and promptly implementing a plan of action to extend the maturities of FEN's local borrowings. This proved to be unrealistic.

5.15 To comply with its obligation to prepare the plan of action, FEN retained consultants who submitted a report, dated February 28, 1985, which analyzes and recommends several alternatives which FEN should consider as sources for raising medium and long term financing. Subsequently, as explained in para 5.24, the Bank retained an expert to review FEN's role as a development banking institution. His report, dated October 14, 1985, inter alia, reviews FEN's capacity to mobilize funds from the domestic capital market and also analyzes options available to FEN to issue longer term securities. Copies of these reports were exchanged between the Bank and FEN, and their contents were apparently discussed in the field during the Bank's preparatory work on the Power Sector Adjustment Loan.

5.16 No attempt was made to implement any of the alternatives recommended to raise medium and long term funds principally because of the unwillingness of domestic banks to assume primary liability for loans to most of the power companies in Colombia whose financial condition was deemed by them to be unsatisfactory. The intermediation of the commercial banks through rediscounting with, or direct guarantee to, FEN was required as a condition for FEN's loans to the power companies. As a result of this impediment to its local currency lending operations, FEN was unable to expand the volume of its loans to the power companies at the rate anticipated during appraisal, and correspondingly it was unnecessary for FEN to expand its domestic borrowings to meet the agreed targets.

5.17 Actual local currency borrowings by FEN were substantially less than the estimates made at appraisal (Part III, Table 4.1). As of year end 1987, the outstanding amount of such borrowings was only 25% of the appraisal estimate. Both the October 1985 and August 1986 supervision missions pointed out the reasons why it had not been possible for FEN to meet the specified borrowing targets (see para 5.16). The former recommended that the Bank accept the reduced amount raised for 1984 as compliance and this was confirmed in a follow up telex. The latter reported that the amount borrowed locally in 1985 was much less than had been agreed, and that FEN had requested a modification of Section 4.12 (a) of the Loan Agreement which would substantially reduce the amounts to be raised locally. It recommended that consideration of this request be delayed until negotiation of the power sector loan then under preparation, so that the decision would take into account the needs of the power sector for such financing as evaluated during the appraisal of that loan. (Supervision Report dated September 16, 1986, Sections II and III). The Banks's follow up telex contained this proposal, which FEN accepted. (Bank telex to FEN dated September 19, 1986; reply telex dated September 24, 1986). Since then, as in the case of the annual review of power sector financing strategy, the annual review of the adequacy of FEN's lending and borrowing operations has been carried out as part of the work related to the Power Sector Adjustment Loan and subsequent activities (see para 5.12), instead of in accordance with the express terms of the loan documents, in this case Section 4.12 of the Loan Agreement.

5.18 The August 1986 supervision mission was carried out by the banking expert referred to in para 5.15. Although he noted that it made no sense to borrow funds that cannot be relent, he was also concerned that FEN had failed to achieve its objective to assist in meeting the financing needs of the power sector by raising funds from domestic financial markets. In his opinion, FEN could increase the amount of its local borrowings substantially without

crowding out other participants in these markets. He recommended that the reluctance of the local financing institutions to lend to the financially weak power companies could be overcome if legislation were passed which would allow them to charge penalties for arrears in payments by the power companies. He estimated that this, plus other steps needed to improve the financial condition of the power companies and establish their earnings at reasonable levels, would make it possible for FEN to increase local borrowings so that by year end 1988 they would reach the nominal amount estimated at appraisal to be attained by year end 1987. This was about two years sooner than was forecast in the financial projections prepared by FEN and reviewed by the August 1986 mission. In actuality, and without enactment of the proposed legislation and with a continuation of financial problems for many of the power companies, the nominal amount of Col$63,000 million of domestic borrowings forecast at appraisal for 1987 was not reached until 1990. In real terms, of course, the amount of funds raised by FEN from the domestic financial market through the end of 1990 was still well short of the appraisal estimate for 1987.

Domestic Lending

5.19 FEN's lending to the power companies from domestic funds has also followed a pattern similar to that of its domestic currency borrowings (Part III, Table 4.2). The actual amount of such loans as of the end of 1987 was 48% of the nominal Col$82,000 million forecast for that date at appraisal, and that nominal level of lending was not attained until three years later in 1990. Again, in real terms the amount of such lending continues to be well under the appraisal estimates.

5.20 The inability of FEN to meet the domestic borrowing and lending targets agreed or projected at appraisal was due primarily to the deterioration in the financial situation of many of the power companies which was not then reasonably foreseeable. Under the prevailing circumstances, FEN accomplished as much as could be expected in relation to the magnitude of its domestic borrowing and lending programs. Similarly, the Bank should not be faulted for having failed to pressure FEN to do more in these respects. The Bank appropriately turned its attention to an attempt to correct the underlying problems which caused the poor financial performance of the power sector through the Power Sector Adjustment Loan. It is the Government which bears ultimate responsibility for the emergence and persistence of deteriorated financial conditions in the power sector.

5.21 FEN has made significant progress in extending the maturity of its domestic borrowings which should be acknowledged. Its initial borrowings were through sale of 90 day and 180 day Electricity Certificates (CEV) sold at a discount which resulted in an effective interest rate which was substantially positive in relation to the prevailing inflation rate. These had a good reception and FEN was able to drop the 90 day paper and offer the 180 day certificates with the option of one renewal for a further 180 days. Beginning in 1985, it has also issued two year Energy Certificates (TER). One fourth of the face values of these certificates is redeemable at half yearly intervals. The interest payable on each coupon payment increases with the maturity. The investor has the option of postponing redemption to subsequent half year points in order to take advantage of the higher effective interest rate. The scale of interest rates is predetermined on a basis expected to be significantly positive in relation to inflation. By 1986, 44% of FEN's total

domestic borrowings were raised through the TERs. The relative importance of the TERs increased in each subsequent year, rising to 93% in 1989. In that year, FEN also began issuing a four year version of the TER. Reflecting recent developments in the domestic financial markets, the interest rate payable on each yearly coupon is related to the average effective interest rate, known as DTF, paid in Colombia on certificates of deposit. The interest rate on the first coupon is equal to DTF; for the second DTF plus 3%; for the third DTF plus 4%; and for the fourth, DTF plus 5%. As of year end 1990, the relative importance of TERs had declined to 53% of FEN's total domestic borrowings. Additional information about FEN's domestic borrowing and lending activities in 1990 and 1991 is presented in paras 5.56 -5.61.

Bank Supervision Activities

5.22 Initially, the Bank closely monitored project execution and FEN operations. As time passed and it became increasingly plain that FEN's role in resolving the power sector's problems would be of minor importance, the Bank gave priority to efforts to prepare what became the Power Sector Adjustment Loan approved in December 1987, to that loan's subsequent supervision, and since 1990 to preparation of a possible sector loan. In this context, the attention given to supervision of this project diminished substantially well before the loan was fully disbursed. As previously indicated in this section 5 and elaborated further below, overall, the supervision effort was ineffective. The discussion under this heading will be related to: (a) supervision missions; and (b) quarterly reports on project progress.

5.23 a. Supervision Missions. There were four supervision missions: September 1984, March 1985, October 1985 and August 1986. The first two missions were carried out by the project officer, an experienced senior power engineer who was able to handle the entire mission by himself very competently even though it would have been preferable at least for the second mission had he been accompanied by a financial analyst and/or an expert on financial intermediaries. After the retirement of that engineer, he was succeeded as projects officer by another senior power engineer who with a senior financial analyst, also new to the project, carried out the third mission. The fourth mission was performed by the banking expert mentioned in para 5.15. He should have been accompanied by a staff member. All of the reports rated the project status as satisfactory and without serious problems.

5.24 One of the purposes of the second supervision mission was to arrive at a model of the type of quarterly progress report to be submitted. This was accomplished during that mission, with the exception of the financial information for FEN, including the key financial indicators to be monitored. (See paras 5.32 -5.39 for a further discussion of the quarterly reports). It was agreed that this gap would be resolved with the assistance of a banking expert who would participate in the next mission. The mission report does not explain why agreement on periodic financial reporting requirements was deferred. This subject had been covered in the letter which the Bank had previously sent to detail reporting requirements (see para 5.32) including, as part of the annual financial information expected from FEN, key financial ratios to be monitored which were identical to those contained in Annex 2.13 of the Staff Appraisal Report. Indeed, the supervision report included a comparison of the forecast and actual ratios for 1984 using these indicators.

This proved to be the last time such monitoring occurred, however; as explained in the next para, no recommendations on this subject resulted from the visit of the banking expert. The mission report emphasized that the participation of a banking or development finance company expert was also necessary to provide advice on a request from FEN for modification of the formula which determines the minimum liquidity requirement it must maintain (specified in Section 4.06 of the Loan Agreement); for the exchange of views from time to time between the Bank and FEN concerning FEN's administration, operations and financial condition (Loan Agreement, Section 4.09); for the annual exchange of views among the Government, FEN and the Bank on FEN's borrowing and lending operations (Loan Agreement, Section 4.12); and to provide advice on questions the mission raised about the basis for FEN's financial projections reviewed during the mission. Prior to the second mission, in a telex dated March 5, 1985, responding to the request for amendment to the liquidity requirements, the Bank had informed FEN of its intention to send someone with a background in development finance, banking and power utility financing to review FEN's role as development banking institution who, inter alia, would provide advice on that request.

5.25 The consultant retained by the Bank for the purposes indicated in the preceding paragraph visited Colombia in September 1985 and issued a report dated October 14, 1985. The item in the terms of reference, dated Sept. 9, 1985, concerning reporting requirements was related to the liquidity issue:

> "(e) Discuss with FEN's management its proposal to improve the liquidity approach ... as well as other monitoring indicators for reporting requirement purposes."

In this context, after reporting that FEN had decided to withdraw its request to modify the liquidity formula, except for a minor clarification, the consultant concluded that "There appear to be no other problems with regard to monitoring clauses on covenants." (Document # 299.342, English translation of consultant's report, page 25). Bank staff failed to notice that the terms of reference had not adequately focussed the consultant's attention on the Bank's desire to have his advice on the information, including key monitoring indicators, concerning FEN's financial performance which should be included in periodic progress reports. This matter was never again raised. Paras 5.28-5.29 contains additional comments on the Bank's limited monitoring of FEN's financial performance.

5.26 The second supervision mission recommended that FEN should analyze the possibility of extending the maturity of its loans (from local sources) to the power companies from five years to seven years, which would be more in line with the sector's needs. This suggestion, adopted by FEN as of June 13, 1985, represents an accomplishment of modest significance which should be credited to that mission.

5.27 The <u>third supervision mission</u>, like the preceding two, reviewed in detail the status of compliance with all of the covenants in the loan documents for this project. In the aide memoire summarizing the findings of the third mission which was discussed and left with FEN, it reported some deficiencies in complying with covenants, including: CVC's delinquency in interest payments to FEN (which was subsequently corrected); Corelca's failure to earn the specified rate of return in 1984; and Government's failure to

submit by the agreed time a price index for the sector to be used for revaluation of assets. The mission informed FEN that the Bank would bring these matters to Government's attention. It also reported the substantial shortfall in local borrowings by FEN in 1984, and stated that it would recommend that this be accepted because as explained by FEN it was unavoidable. The Bank sent a telex to FEN confirming the mission's findings as set forth in the aide memoire. A draft telex to the Government, however, which the supervision report recommended to call attention to the shortcomings of CVC and CORELCA and the delay in proposing a sector price index, and request that remedial action be taken, was not sent. There is no explanation in the project files why this telex was not sent; presumably it was just an oversight.

5.28 The fourth supervision mission reviewed FEN's financial performance for the period 1983-85 in comparison to the forecasts made at appraisal. It concluded that FEN's financial results for 1985 and the two previous years were satisfactory. The rate of return on equity of 21% in 1985 and 1984 and 22% in 1983 was compared with yearly inflation rates of 16% for 1985, 18% for 1984 and 17% for 1983 and thus indicated to be about four percentage points positive. Although a comparison in this respect with what had been assumed at appraisal was not presented, it would have shown that the appraisal report understated the 1983 performance and had estimated rates of return on equity of 20% and 21% for 1984 and 1985, compared to estimated inflation rates of 22% and 20%, respectively (Part III, Table 5.1). The mission was evidently misinformed on the average yearly inflation rates for these years which, as officially reported based on the CPI, were 20% in 1983, 16% in 1984 and 24% in 1985. On this basis, the performance for 1985 fell somewhat short of satisfactory.

5.29 This mission also reviewed the financial projections for 1986-95 which FEN had prepared (as required by Section 4.02 (b) (ii) of the Loan Agreement.) It characterized the underlying assumptions as "fairly conservative" and concluded that "The financial development of FEN is expected to proceed smoothly". It did not present an analysis of projected annual rates of return on equity. Had it done so, this would have shown that they were forecast to be about 20-22% in 1986-89 and 18% thereafter, and that these returns were about equal to the estimated yearly inflation rates. Although it was appropriate at the time to accept these forecasts as reasonable, FEN's actual performance in this respect has proved to be unfavorable (see para 5.46).

5.30 The mission's terms of reference called for it to report on FEN's organization and management, including "the changes that have recently taken place through the incorporation of additional staff...an assessment of the technical and financial evaluation of projects being carried-out by FEN and of the suitability of their staffing, training and methods...(and) an assessment of FEN's ability to monitor and evaluate the finances of FEN's borrowers..." (Memo., July 18, 1986). The mission's response to this (Supervision Report dated September 16, 1986, Section IV and companion report, dated September 18, 1986, assessing FEN's potential role under the then proposed power sector loan, section on "Organization and Administration") was perfunctory: a description of FEN's overall organization; a description of the reorganization of the Technical Vice Presidency and a reference to the recruitment of additional staff for this unit as recommended by the study described in para 5.9; a list of the thirteen professionals and their qualifications assigned to

this Vice Presidency; a judgment that FEN is well prepared to undertake the activities for which it was created, qualified by the statement that it is too early to assess the efficiency of the technical staff because they have not yet had much opportunity to demonstrate their capabilities; and a recommendation that future missions should assess the performance of this staff and what additional measures may be needed, such as training or recruiting additional personnel. This inadequate treatment demonstrates that it was a serious mistake on the part of the Bank to assign exclusive responsibility for this supervision mission to a consultant banking expert. While this consultant was well qualified to deal with development banking and financial market issues, he was lacking in expertise to assess FEN's capabilities to evaluate and monitor electricity projects, and perhaps even to assess its ability to monitor the finances of the power companies who were FEN's borrowers, a subject which he failed to address. Had a member of the Bank's staff experienced with power projects also participated in this mission, this omission would probably not have occurred and it is likely that a more searching analysis of the organization and management issues would have been made. Although the reorganization of, and modest expansion of staff assigned to, the Technical Vice Presidency had only recently occurred, it should have been possible to arrive at preliminary judgments as to how these recommended changes were working out and to decide whether it was appropriate then to recommend further use be made of the services of the consultant responsible for the recommendations to assist in their implementation.

5.31 The consultant's limited fulfillment of one other task specified in his terms of reference leads to a similar conclusion. This relates to the requirement that his "report on compliance with loan conditions should update the one presented in the November 11, 1985, supervision report and should include your recommendations, if you identify a situation of non-compliance." His report, however, was limited to a review of the conditions contained in the Loan Agreement and omitted any reference to those in the Power Financing and Guaranty Agreements which had also been covered in each of the previous supervision missions. Thus he failed to review with FEN the status of compliance by the power companies with the revenue covenants and what action FEN and the Government were taking where there was non-compliance. Nor did he follow up on the non-fulfillment by the Government of its obligations to prepare and publish a price index for the power sector. Again, it is unlikely that these omissions would have occurred if a member of the Bank's staff had also been assigned to the supervision mission.

5.32 b. Quarterly Project Progress Reports. The Bank's requirements for periodic reports were originally detailed in a letter to FEN dated July 13, 1984, which also set forth the Bank's views on subproject information to be included in subloan applications. As proposed in this letter, FEN would have included in each report information on the status of execution of each subproject its subloans were financing, including a discussion of problems encountered and solutions proposed for dealing with them. This suggestion was reiterated in the Bank's comments on the first quarterly report submitted by FEN covering the period ending Dec. 31, 1984 (Telex dated Feb. 22, 1985). In reply, FEN stated it had not contemplated that it would be necessary for FEN, in its capacity as a financial intermediary, to follow directly and report quarterly the progress in implementing projects partially financed by the "A" and "B" loans (Telex dated Feb. 28, 1985). This position was accepted by the Bank. The project record contains no explanation for this change of view.

Presumably the Bank recognized that it would be premature to place this burden on the newly created FEN and that the status of implementation of projects directly financed by Bank loans would be reported to it in the quarterly reports provided by the power companies involved.

5.33 As agreed with the Bank, the quarterly reports contained a main text which provided information on the status of: (i) disbursement of the "A" and "B" loans into the special accounts at the Central Bank; (ii) contracting of subloans including sources of funds allocated thereunder; (iii) subloan disbursements; and (iv) balances in the special accounts. Also included was a detailed schedule of project costs which implicitly defined costs as the amounts to be provided by FEN as subloans and distinguished between foreign and local costs in terms of the currency of the expenditures so financed. It contained a break down for each subloan of the amounts of financing allocated from the "A" and "B" loans to particular projects (e.g. San Carlos or Playas) and works (e.g. a named transmission line or substation), and these amounts were also broken down to show foreign and local expenditures separately. This data was presented separately by source of financing: Bank financing from the "A" loan, the Bank's share of each of the "B" loans, and each of the "B" loans excluding the Bank's share. One set of columns showed the project cost as originally established when the subloans were contracted, and a second set as last revised to reflect the changes in allocations proposed by FEN and agreed by the Bank during project implementation. A final set of columns showed the total amounts disbursed to date for each line item by source of financing but without distinguishing whether the expenditures actually so financed were foreign or local. The reports also included annexes listing the items for which subloan disbursements were made during the quarter and which were financed from the "A" loan and the Bank's share of the "B" loans; this listing identified, for civil works, equipment and materials, the pertinent contract, the bills and their amounts, and, for interest during construction, the pertinent loan, the amounts and dates of the payments. Finally, the quarterly reports contained an annex showing the status of compliance with the loan conditions.

5.34 This comprehensive report was well designed, on the whole, to keep both the borrower who prepared it and the Bank who received it informed on a timely basis of the status of project implementation. There was one significant omission, however, in the list used to report on compliance with loan conditions, which contributed to the failure to audit statements of expenditures. The list did not refer to that part of the covenant requiring an annual audit of FEN's accounts and financial statements which specifies that the report of the independent auditor shall include a separate opinion as to whether the proceeds of the Loan disbursed on the basis of statements of expenditures (see para 4.21) were used for the purposes for which they were provided (Section 4.02(a), Loan Agreement). None of the audit reports contain such a separate opinion, and in those audit reports which have a separate section detailing compliance with financial covenants, this requirement is also omitted. It is implicit that the terms of reference for the audits did not include this task as part of the audit. It is also significant that the requirement to audit the statements of expenditures was not included in the list of covenants for which an annual report of compliance was requested in the Bank letter of July 13, 1984, which detailed reporting requirements. This omission, and the failure ever to be aware during project supervision that the statements of expenditures had not been audited, may be attributed to lack of

familiarity of the concerned projects staff with the Bank's requirements for statements of expenditures because disbursement on this basis was not normally used for power projects.

5.35 The adequacy of the Bank's review of the quarterly reports may be questioned in several respects.

a. There were only two occasions when Bank staff who reviewed the reports made substantive comments on the Progress Reporting Slip attached to the reports for circulation purposes. One was in August 1985, when it was noted that the report was incomplete. A follow up letter was written (dated August 21, 1985) to request inclusion in the future of (i) sections reporting actions taken and progress achieved concerning improvement of FEN's capacity to analyze and evaluate the technical and financial merits of projects and to mobilize domestic savings to finance the power sector; and (ii) a section detailing the status of compliance with all loan conditions. Although FEN replied that it would comply with these requests (letter dated August 29, 1985), subsequent reports did not in fact include the additional sections mentioned in subdivision (i) of the preceding sentence. The Bank, however, was otherwise able to keep track of these matters (see paras 5.9 and 5.13-5.21). The second was in February 1987 when a comment was made that extension of the closing date had been approved to permit completion of disbursements.

b. Beginning with the report for the second quarter of 1986, the annex on status of compliance with loan conditions was limited to covenants in the Loan Agreement. This change passed by unnoticed without a request by the Bank that this annex should continue to include the Power Financing and Guaranty Agreements.

c. The much lower utilization rate of subloans by EPM in comparison to that of the other power companies was never noticed and as a result no inquiry was made to find out why it was occurring. EPM's relatively low rate was consistently reported in a tabular analysis of the utilization of subloans included in the reports beginning with that for the first quarter of 1985. That initial report showed no utilization by EPM, whereas the utilization rate for the other four companies ranged from 43% to 92%. In the report for the third quarter of 1985, which was reviewed in the field by the October 1985 supervision mission, EPM's utilization rate is listed at 20%, whereas that of the other companies ranged from 60% to 100%. The situation in this respect which prevailed at the time of the August 1986 supervision mission is described in para 5.6. By implication, it appears that the allocation of loan funds to EPM exceeded its needs and that consideration should have been given to the feasibility of reallocating some funds to other companies in order to accelerate disbursements. The question also arises whether FEN, like the Bank, is culpable for failing to notice and consider EPM's low utilization rate a problem concerning which remedial action should be considered. If, on the contrary, it did take or consider taking action in this respect, this should have been highlighted in its reports to the Bank. The

Bank requested FEN to report problems encountered and solutions proposed or effected to resolve them in its first letter to FEN describing reporting requirements and in the telex message commenting on the first quarterly report submitted by FEN (see para 5.32).

5.36 There are some respects in which improvements in the reporting design would have been desirable. One concerns the categories of expenditures expected to be financed. As set forth in each subloan agreement, the amounts allocated to each project (e.g. Guavio or Cerrejon II) or work component (e,g. a specified transmission line or substation) are subdivided among types of expenditure, such as civil works, equipment and materials, engineering and administration, interest during construction and contingencies ("imprevistos" or "por distribuir"). It would have been much more significant to compare the actual expenditures with the original allocations broken down to show the type of expenditures, rather than simply comparing total expenditures. Also, it would have been useful if there had been understandings on how various limits on financing agreed with the Bank and the commercial banks would be tracked to ensure that the limits were observed. Specifically, this applies to:

a. Supplemental and overrun financing. For projects already partly financed by the Bank, project cost overruns were not eligible for Bank financing except for the Mesitas Project (Supplemental Letter #2, June 27, 1984); as a consequence, in all other cases involving supplemental Bank financing under this project for civil works, goods and services, the amount of such financing was to be limited to the amount of project costs originally expected to be financed by commercial lenders, to the extent such financing had not been forthcoming. As stated in para 4.24, it was intended that these limits would be taken into account in approving subloans; while his was a reasonable approach a review of how this worked out would have been desirable as part of FEN's final report.

b. Retroactive Financing. In the case of the Bank, financing of expenditures prior to the date of the loan agreements (June 27, 1984) were to be limited to US$29 million from the "A" loan and the Bank's portion of the "B" loans, for payments after January 1, 1983 (Loan Agreement, Section 2.02 (d) and Supplemental Letter #2, June 27, 1984; and in the case of the US$175 million "B" loan, exclusive of the Bank's share, financing of expenditures incurred or paid after January 1, 1983 was limited to US$50 million for expenditures incurred and paid before January 1, 1984 (Loan Agreement, Clause 5 (B) (c)).

c. Foreign Costs. With respect to civil work costs, as earlier discussed in paras. 4.22 and 4.24, the disbursement procedures followed by FEN and accepted by the Bank, did not ensure that financing under the project was limited to foreign costs, as was expected. (See the statement that subloans under the project would finance foreign costs and the analysis of the financing of the project's total estimated foreign costs in the Staff Appraisal Report No. 4771-CO, paras 4.07-4.08 and in the President's Report No. P-3750-CO, para 58). This was a specified requirement for

Bank financing (Loan Agreement, Section 2.02 (d) (iii) and Supplemental Letter #2, June 27, 1984). It was simply an expectation, and not a formal requirement, for the commercial bank financing.

With respect to the limits on retroactive and foreign cost financing, pertinent data should have been provided routinely, if not as part of the quarterly reports, then less frequently, perhaps annually. In any case, FEN should have been requested to comment on all three of these matters as part of FEN's Final Report. The significance of these comments should not be overstated, since, on the basis of the overall review of the project record, it does not appear that deviations, if any, from these financing limits were material. The fact remains, however, that as matters now stand, one cannot be certain that they were observed.

5.37 The differences between the concept of project cost as applied at appraisal and subsequently during project implementation deserve comment. As presented in the appraisal report, the estimated cost of the project was the sum of the costs estimated to be incurred by ISA, EEEB, EPM and CVC during 1984 and 1985 for ongoing works, interest during construction related thereto and studies. (See Staff Appraisal Report No. 4771-CO, para 4.08 and Annex 5.39.) On this basis, the project cost in current money terms was estimated to be US$1,602 million, of which the estimated foreign costs were US$898 million and local costs were US$704 million. This was exclusive of estimated investments of US$377 million in projects of other utilities, US$70 million in working capital increases and US$645 million for future construction, i.e. projects just starting or recently begun. The costs of the construction programs of CORELCA and ICEL were also excluded since their participation in the project was uncertain. As proposed by the Bank in its letter of July 13, 1984, explaining reporting requirements, this concept would have been continued. What was proposed was a table which would have comparative columns showing local, foreign and total costs as estimated at appraisal and as last revised, followed by columns which would show disbursements to date and funds remaining to be disbursed. The "costs" to be financed by the "A" and "B" loans would be listed in detail with separate line items showing the source and amounts of financing to be provided for each subloan, in a format like that described in para 5.33; followed by a section consisting of one line item labelled "Ongoing works committed under other financing"; and a final line for "Total Cost." The totals in the column showing the "Original Project Cost Estimate" would add up to US$1,602 million, subdivided between local and foreign costs as shown in the appraisal report; the subtotal for the project costs financed by the "A" and "B" loans would be US$370 million; and the subtotals for the "Ongoing Works" would be the differences between the Total Costs and the amounts financed by the "A" and "B" loans. As proposed in the July 13, 1984, letter, all of the financing provided by the "A" and "B" loans would have been shown as for foreign costs. This was consistent with the analysis presented in the appraisal report (para 4.08), which applied the Bank's broad definition of foreign costs as including indirect foreign costs paid for in local currency. In the report of the first supervision mission (dated October 10,1984, Annex 7, para 5), this was changed to show the estimated amounts of financing expected to be provided as subloans to each of the power companies, divided between foreign and local costs. The amounts used are identical with those in a table in the project files which apparently records an understanding reached during negotiations as to the allocation of

the project financing and which distinguishes foreign and local costs on the basis of the currency of payment (Distribution Credito FEN-BIRF, March 1984, Doc. No. 287.062 -9).

5.38 The first three supervision missions included in their reports a presentation of project costs on the basis just described, including for the last two a comparison of the appraisal estimate with a new estimate. The latter, however, reflected only some minor changes since appraisal in the US$ values of the Japanese yen financing component of the "B" loans; no changes from the appraisal estimates were made in the figures presented for the "Balance of Ongoing Works", even as late as the third mission in October 1985. Nor was there any recognition that if this concept were to be followed, it would be necessary to increase the amounts shown as "Total Project Cost" and "Balance of Ongoing Works" to include the balance of the 1984 and 1985 construction programs of CORELCA, once it was determined that some of the "B" loan financing would be allocated to it.

5.39 For purposes of the quarterly progress reports, FEN was not required to report project costs on the basis proposed in the July 13, 1984 letter; instead, as described in para 5.33, it followed a definition of project costs limited to the amount of the financing provided under the project's subloans. The project record does not contain an explanation why the Bank chose not to insist on its original proposal. Presumably, however, as indicated in para 5.32 for a similar issue, the Bank recognized that it would not be feasible to expect the newly created FEN to implement such a proposal. The Bank made no effort during project implementation to arrange with FEN to obtain the data needed to compare the actual costs which the five companies involved incurred for their construction programs in 1984 and 1985 with the appraisal estimates; nor did it arrange to obtain the complementary data needed to compare their actual and estimated financing plans for these years which would be an essential part of any such comparison. Thus, this specific comparison is unavailable for purposes of this report, and the sector context, which it would have provided, for evaluating the performance under this project of FEN, the Government and the Bank, is lacking. This is not a serious shortcoming since the sector context is well known in broad terms through the Power Sector Adjustment Loan (President's Report NO. P-4676-CO, November 10, 1987) and the evaluation, "Colombia, The Power Sector and the World Bank, 1970-1987", issued by the Operations Evaluation Department (Report No. 8893, June 28, 1990).

Activities Subsequent to Completion of Disbursements.

5.40 Three significant developments which occurred after completion of disbursements should be mentioned: first, FEN's unilateral six month extension, effective August 1, 1988, of the period of amortization of subloans; second, a temporary exception from the requirement that FEN's debt to equity ratio should not be greater than 7:1 granted November 15, 1989; and third, the expansion of FEN's responsibilities in 1990 and 1991, particularly concerning its domestic borrowing and lending activities.

5.41 a. Six Month Extension of Subloan Amortization Period. The issues related to FEN's unilateral extension of the grace period for repayment of the project subloans are discussed in detail in Annex I. The main points are summarized in the following paragraphs.

5.42 In July 1988, FEN informed the Bank that its Board of Directors had adopted a resolution which extended the subloan amortization period by six months. This action was taken without prior consultation with or consent by the Bank. Section 3.02 (b) of the Loan Agreement, however, provides that, except as the Bank shall otherwise agree, FEN shall not amend, or fail to enforce any provision of, the subsidiary loan agreements. In order to determine whether to approve the action taken, the Bank in August 1988 requested FEN to provide it with financial projections for the next two years so that it could see how FEN's finances were affected. The Bank also asked FEN, when similar cases arise in the future, to provide it with an opportunity to comment before decisions are taken, as required by the loan documents.

5.43 The requested financial projections were sent by FEN in September. An internal staff memorandum dated November 28, 1988, refers to, but does not include, actual and forecast financial statements for the period 1984-90 prepared from the information received from FEN and available in the files. The memorandum states that these show that the extension of the subloan amortization period will not have any material effect on FEN's finances and that FEN would continue to have adequate financial ratios. As recommended in the memorandum, a letter was sent on December 2, 1988, expressing no objection to the modification of the subsidiary loan agreements. The letter emphasizes that the procedure utilized by FEN to modify the subsidiary loan agreements without the Bank's prior agreement was not in accordance with Section 3.02 (b) of the Loan Agreement, and it requests the personal intervention of FEN's President to ensure strict compliance in the future with the provisions of the loan documents.

5.44 The aforementioned memorandum was prepared by an assistant level analyst. The file copy of the letter notes that it was cleared in substance by a senior financial analyst; this matter, however, may have received only cursory attention by him. Considering the record as it now exists with some of the supporting material for the Bank's conclusions missing from the files, one is left with the impression that the Bank's financial analysis was superficial, and that the Bank, having been presented with a fait accompli, decided it had no choice but to accede to the extension with the admonition that FEN seek the Bank's prior approval for any future modifications of the subsidiary loan agreements.

5.45 On the basis of a retrospective review, it appears that had this matter been analyzed adequately, the Bank would have become aware of two important issues: (i) the negative real rate of return on equity earned by FEN since 1985; and (ii) the mismatch between the repayment terms of the external loans for this project and of the subloans made from these sources. Had this occurred, the Bank could have suggested corrective measures.

5.46 (i) Decline in FEN's Real Return on Equity. The conclusion expressed in the aforementioned memorandum that FEN would continue to have adequate financial ratios was inappropriate insofar as it applied to FEN's return on equity. As indicated in Part III, Table 5.1, FEN's real return on average equity was significantly positive in 1983 and 1984. It became marginally negative in 1985 and substantially so in 1986 and 1987, when the nominal return on equity for each of these years was 16%, in comparison to rates of inflation of 19% and 23%, respectively. The projections supplied by FEN for 1988-90 explicitly called attention to the expectation that the rate of return

on equity for 1988 would be negative by about 10 percentage points. As shown in Table 5.1, the actual nominal return on equity for 1988 was 16.7% compared to an inflation rate of 28.1%. FEN's projections that its return on equity for 1989 and 1990 would match the inflation rate did not, however, prove to be accurate. The actual return on equity in 1989 was 16.6%, compared to an inflation rate of 25.8%, and in 1990 the actual return was 23.9% compared to an inflation rate of 29.1%. In evaluating the justification presented for the extension, the Bank should have noted that FEN's rate of return on equity for several years was substantially less than the rate of inflation and inquired into the reasons for this unsatisfactory relationship and the remedies that might be proposed for correcting it.

5.47 (ii) Mismatch between Repayment Terms of External Loans and Subloans. The six month extension of the grace period on the subloans postponed FEN's receipt of the initial repayments otherwise due thereunder beginning in October 1988. This action, taken after FEN's repayments of the "A" and "B" loans had begun in June 1988, increased the amount of borrowings FEN had to make from the local capital market to meet its repayment obligations on the external loans for the project. The Bank made no specific analysis of FEN's situation in meeting its debt service requirements as originally scheduled and as modified because of the extension. Had this been done, it would have supported the Bank's conclusion that the extension would not have a material effect on FEN's finances, because the significant borrowings which were needed would not have an adverse effect except briefly initially. Far more important, however, the Bank would have realized that the original relending arrangements, based on a 13 year term for the subloans, had resulted in a significant mismatching of maturities of the subloans and of the foreign loans, which was not anticipated when the project was appraised. The analysis also should have led the Bank to consider the situation which would have been applicable if the maximum 15 year term for subloans permissible under the project agreements had been utilized. This alternative would have increased substantially the amount and extent of borrowings by FEN needed to meet debt repayment obligations on the foreign loans which were larger than the repayments it received on the subloans. On the other hand, it appears in retrospect that if the issues had been appropriately analyzed in 1988, the Bank would probably have concluded that there was a compelling case to recommend substitution of an extended 15 year term for the extended 13 year term for the subloans. This would have been based on a judgment that the higher amount of domestic borrowings needed could be raised by FEN without adversely affecting its profitability, and that FEN's unprotected exposure to foreign exchange risk under the 13 year subloan term would be reduced. The longer repayment period would also have lessened the burden the power companies were experiencing in meeting their debt service requirements, the unstated reason for the extension. This retrospective analysis also demonstrates that the Bank's analysis of repayment terms during appraisal was inadequate, and that this was the case too during supervision, when the draft subsidiary loan agreements submitted by FEN were reviewed and approved without participation of a financial analyst.

5.48 The Bank's failure to recognize, and adopt measures to minimize, the mismatch between FEN's repayment terms on the "A" and "B" loans and the repayment terms to FEN on the subloans made from those sources had adverse consequences. Of much greater significance, however, is the mismatch of the short repayment terms of the loan capital made available to the power

companies from both foreign and domestic sources in comparison to the long construction periods and useful earning lives of the assets financed by these loans. This issue and steps FEN might take to provide suitable term transformation to the power companies to resolve this problem are discussed in paras 5.62-5.64 and Annex II. Such measures would also eliminate the mismatching problems discussed herein for the period subsequent to their adoption.

5.49 b. Temporary Exception from 7:1 Debt to Equity Limit. Since 1988, FEN has not complied with its undertakings to maintain its debt/equity ratio within the limit of 7 to 1 and not to incur any debt which would cause it to exceed that ratio, except as the Bank shall otherwise agree (Loan Agreement, Sections 4.04 and 4.05). The ratio, as of the year end, was 7.4 in 1988, 10.0 in 1989 and 8.8 in 1990. The shortfall in required equity to comply with these covenants as of the year end was about 6% for 1988, 44% for 1989 and 26% for 1990. In money terms, using year end exchange rates, the shortfall in required equity was approximately Col$2.1 billion or US$6 million for 1988, Col$18.2 billion or US$42 million for 1989 and Col$19 billion or US$33 million for 1990.

5.50 For these calculations, the total stockholders' equity has been compared to total liabilities as reported on FEN's audited balance sheets. In the independent auditors' report on FEN's compliance with this covenant, the equity base is limited to the sum of paid-in-capital, legal reserve and retained earnings, and all other reserves and the amount credited to equity as exchange adjustments are excluded. As defined in Section 4.05 of the Loan Agreement, "equity" means "the sum of the total unimpaired paid-up capital, retained earnings and reserves of the Borrower not allocated to cover specific liabilities." Under that definition, the credit for exchange adjustments should be considered to be part of retained earnings, since it should be counted as part of net profits as stated in Annex I, para 9. The treatment of the other reserves is questionable. Two of them, the reserve described as "At the Board's disposal" and the reserve for "Donations", appear to be allocations of retained earnings made as general provisions without any specific basis or commitments, and if that is so they should be included as part of equity. The other two reserves, for "Loan Provisions" and "Taxation", may also fall into this category. If any of these allocations were deemed to be necessary simply as general provisions for a particular expense category, the more appropriate accounting treatment would be to include them as charges against earnings on the income statement and reflect the corresponding credits under a heading other than "equity" on the balance sheet. For purposes of this report, all of the reserves have been counted as equity. If it is subsequently determined after further consideration that some or all of the reserves should be excluded, the shortfall in required equity will be increased. For example, at year end 1990, if the reserves for Loan Provisions and Taxation were excluded, the debt equity ratio would be 9.0 and the shortfall in equity would be 29% and amount to Col$20.7 billion or US$36 million.

5.51 In calculating the debt/equity ratio, total liabilities are used because the term "debt" is defined in Section 4.05 of the Loan Agreement to mean "any indebtedness of the borrower". The liability base used by the independent auditors for calculating the ratio also includes contingent liabilities for credits approved and not disbursed. This approach has not

been followed for the ratios presented in the two preceding paras because under Section 4.05 the amount of debt is limited to the extent to which it "has become outstanding". Thus, the ratios presented herein are lower than those cited in the independent auditors' reports because they are based on a higher measure of stockholders' equity and a lower measure of total liabilities than used by the auditors.

5.52 In specifying debt/equity ratio limits in a capital structure covenant, the Bank's normal practice is to define debt as "any indebtedness of the borrower maturing by its terms more than one year after the date on which it is originally incurred." (See Operational Manual Statement No. 2.22, Annex 7, Issued: February 1984.) This definition was not applied for this loan because it was expected that FEN would be raising substantial amounts of its borrowed capital from the domestic markets on a short term basis in the expectation that such short term borrowings would be refinanced or rolled over at maturity. In retrospect, it appears that the definition adopted, "any indebtedness", went further than was necessary, and that it would be possible to define "debt" to include such short term borrowings as part of the prudent capital structure limitation while excluding normal short term liabilities not usually counted for this purpose. If this approach were applied as of the end of 1990 and total liabilities were reduced by subtracting accounts payable and certain other liabilities and accrued expenses and provisions, the debt/equity ratio would be 8.2 and the short fall in equity would be 17% and amount to Col$12.2 billion or US$21.5 million.

5.53 The possibility of increasing the permissible debt/equity ratio was raised inconclusively during project implementation. The banking expert who carried out the fourth supervision mission in August 1986 was also asked to assess FEN's potential role under the power sector adjustment loan then under preparation. Among the matters he was asked to review was the reasonableness of the 7 to 1 debt/equity limit, including if necessary recommendation of an alternative ratio (Terms of Reference, dated July 18, 1986). He proposed that the limit be raised to 12 to 1 in order to accommodate proposed borrowing levels and provide room for additional borrowing. The higher ratio, in his opinion, "would remain at a level that is acceptable by usual banking standards." His analysis was based on the financial forecasts prepared by FEN (mentioned in para 5.29) which made no allowance for its participation in the power sector adjustment loan. This analysis showed that from 1986 to 1989, FEN's outstanding debt was otherwise expected to increase from the equivalent of US$411 million to US$527 million, or by 28%. Under the 7 to 1 debt/equity limit, additional debt would be permissible equivalent in amount to US$364 million in 1986 rising to US$696 million in 1989. Under a 12 to 1 limit, the additional permissible debt would amount to US$918 million in 1986 rising to US$1.57 billion in 1989. Although this analysis does not present a prima facie case for any immediate increase in the debt/equity ratio limit, nor for one so large as recommended, the routing memorandum (dated September 18, 1986) which circulated this report noted that the acting division chief concurred in the recommendation. No action was taken on this recommendation, probably because it was subsequently decided not to utilize FEN as an intermediary for the power sector adjustment loan.

5.54 By letter dated June 20, 1989, FEN requested a temporary exception from the 7 to 1 debt/equity limitation. FEN referred to several major foreign credits to be made available to it shortly which would cause it to exceed this

limit. It also referred to pending legislation which would expand its responsibility to the energy sector and pursuant to which FEN would receive additional capital contributions of about Col$30 billion in 1989. It stated that this would bring it back into compliance with the debt/equity limit. It concluded with a statement of its intentions to submit information by the end of 1989 in support of a request for a permanent increase in the debt limit. This request was endorsed by a letter from the Minister of Finance dated July 10, 1989. Subsequently, at the request of the Bank, the Minister of Finance in a letter dated August 31, 1989, informed the Bank that the Government had requested the Colombian Congress to authorize contributions of capital to FEN in an amount sufficient to bring it back into compliance with the agreed debt limitation by June 30, 1989. This letter may have been lost in the mail or misplaced, but after receipt of a copy submitted by FEN, the Bank agreed, in a telex dated November 15, 1989, to a temporary exception from the covenanted debt limit until June 30, 1989.

5.55 The new law expanding FEN's responsibilities and authorizing large increases in its capital was not enacted until February 8, 1990. On June 28, 1990, FEN requested an extension of the temporary exception until the end of 1990 (this letter is missing from the files). This request was endorsed by the Minister of Finance in a letter dated July 3, 1990. There is nothing in the files to indicate what action if any the Bank took on this request, but presumably it was granted. In December 1990, the first increment of equity capital to be provided to FEN under this law was paid in by the Government in the amount of Col$19.76 billion, equivalent at the year end exchange rate to about US$35 million. As indicated above in paras 5.49 and 5.50, this was not sufficient to bring FEN back into compliance with the covenanted debt limit. In September 1991, FEN requested comments from the Bank and the Interamerican Development Bank (IDB) on a proposed increase of FEN's debt/equity ratio; and in December 1991, FEN provided supporting information to its request for a waiver of the negative pledge clause covenanted with both institutions. FEN points out that under new legislation (Law 1731 of July 4, 1991) FEN now operates under the rules and regulations applicable to financial corporations in Colombia. FEN proposes that the covenanted debt/equity ratio of 7:1 be amended to conform to the limits allowed by Colombian law which allows a maximum ratio of risk-weighted-assets to equity of 12:1. Under this approach, the risk adjusted basis of assets may range from zero risk to 100% risk, including intermediate points. To the extent that assets have less than 100% risk, a risk-weighted-assets to equity ratio translates into a higher debt/equity ratio because a corresponding amount of liabilities which financed these assets is not counted in the risk-weighted-assets to equity ratio. This has its biggest impact in FEN's case for the large amount of loans to power companies financed from foreign loans which were guaranteed by the Government and are therefore classified as having zero risk. Thus, as of August 31, 1991, FEN's risk-weighted-assets to equity ratio was only 0.9:1 when its estimated debt/equity ratio was 11:1. If FEN were to increase its risk-weighted-assets to equity ratio to the limit of 12:1, it would mean an increase in its debt/equity ratio to about 20:1 or more. Both the Bank and IDB are evaluating FEN's requests in the context of the role and financial risk under which FEN will be expected to operate in the future. This will depend on the final structure of the power sector, currently being debated in Colombia as part of the proposed new electricity law drafted in December 1991, which may allow greater private participation in the power sector. Consideration should also be given to the increased risk FEN is now taking for

its domestic borrowings (see reference to Law 51 of 1990, next para) and the further risks it would take if it expands its term transformation role (see Annex 2).

5.56 c. Increases in FEN's Responsibilities - 1990 and 1991. Two laws enacted in 1990 substantially increased FEN's scope of operations. One of these, Law 25 of 1990, is mentioned in the preceding para. This law authorizes FEN not only to finance investment programs and projects, but also to refinance debt service obligations in order to rationalize the functioning of the energy sector in accordance with the Government's policies. Specifically, FEN is authorized to: (i) make loans to sector entities to finance debt service payments due on foreign loans or the domestic obligations derived from such loans; or (ii) to assume obligations of sector entities under loan contracts in exchange for new credits under which the obligations assumed by FEN would be repaid to it under new terms and conditions and the Government's guaranty of the original loans would continue to apply to the new credits owed to FEN. As stated previously, Law 25 also authorized large additions to FEN's equity capital. Reflecting the expansion of FEN's responsibilities to include the entire energy sector, this law changed its name to Financiera Energetica Nacional. Most of FEN's activities, however, continue to be primarily focussed on the power sector. The second statute, Law 51 of December 28, 1990, modified Law 25 to delete the requirement that FEN credits made from domestic savings must have a bank guaranty or be rediscounted. It also authorizes FEN to determine the terms and conditions to be met by borrowers to be eligible for loans from FEN and to undertake fiduciary operations when deemed necessary to reorganize the finances of the sector.

5.57 FEN's annual report for 1990 (English version, page 15) reports an additional development which would permit FEN to participate more actively in the national savings market and funnel a greater volume of resources to the power sector. This was the action of the Monetary Board in November 1990 authorizing FEN to attract the domestic savings it considers necessary and eliminating previously existing limits on amounts raised from the local capital markets.

5.58 (i) Lending to Refinance Foreign Debt Service. The steps taken in 1990, explained in the two previous paras, were designed to give FEN a new function, which is described in the 1990 Annual Report (page 22) as "External Debt Service Support Loans - CADEX". This replaces a previous program, FODEX (Foreign Exchange Fund), utilized by the Government to make peso loans to Government entities, and most importantly the power companies, that otherwise would have had insufficient peso funds available to purchase the foreign exchange needed to meet their debt service obligations on Government guaranteed foreign loans. FODEX had two sources of funds for these loans: surpluses accumulated by other Government entities, such as the Coffee Fund; and, to the extent that this source was insufficient, funds made available by the Central Bank on behalf of the Government. The surpluses of the other Government entities were loaned to FODEX on short terms and onlent by it on similar terms. FODEX loans funded by the Central Bank on behalf of the Government were repayable over somewhat longer terms. Repayment of this second category of FODEX loans is one of the sources authorized under Law 25 to be utilized by the Government to increase FEN's equity capital.

5.59 Under the CADEX program, payments of US$169 million owed by power companies to foreign lenders and suppliers were budgeted to be financed for the second semester of 1990. FEN's sources for providing this financing are listed as US$72.5 million from the 1989-90 Integrated Loan Facility (i.e. the "Challenger" foreign commercial bank loan); US$37 million from capital increases; and US$59.5 million from "others, Short Term" (presumably FEN's borrowings from domestic savings). Actual remittances abroad under the CADEX program, which had been operating since September, amounted to US$127 million by year end 1990, and the balance of the budget remained to be drawn down in 1991 (1990 Annual Report, English version, pages 9, 22 and 23).

5.60 FEN's domestic borrowings increased by Col$16,394 million in 1990, mainly during the last two months of the year (ibid, page 14). This plus the capital increase of Col$19,760 million pesos in December were the apparent sources for Col$32,029 million of direct short term loans to power companies made in 1990 and outstanding at year end (Audited Financial Statements, Annex No. 1, page 2). It is implicit that these direct loans were made under the CADEX program and that all loans from domestic sources made by FEN in 1990 under the CADEX program were short term.

5.61 During 1991, the outstanding amount of FEN's domestic borrowings increased 5.4 times from Col$65,729 million at the end of 1990 to Col$356,894 million at the end of 1991 (FEN's letter, dated 3 January 1992, commenting on a draft of this report). As a result of steps taken in 1991, including freeing the peso so that since October 1991 most foreign exchange transactions, including those of FEN and the power companies, take place in the market, there has been a substantial real appreciation of the peso in relation to the US$. Thus, converting the peso values of domestic borrowings into US$ at the exchange rate that prevailed at the end of 1990 (Col$568.73) and the parallel market rate at the end of 1991 (Col$633.68), domestic borrowings increased from the equivalent of US$115.6 million to US$563.2 million, or by almost five times. The dollar equivalent values are significant because the domestic borrowings were used principally to finance debt service payments of the power companies due on loans guaranteed by the Government, i.e. foreign loans.

5.62 Financial assistance to the power companies to meet their debt service obligations is needed because the repayment terms of their loan financing impose financial burdens on them which are not reasonably related to their earning power, even assuming that they were efficiently operated and managed and the level and structure of their tariffs were appropriate. This mismatch between lending terms and earning power was not deemed to be a problem when the arrangements for this project were agreed in 1984. At that time it was anticipated that for 1984-87 the individual companies, except for the CORELCA and ICEL groups, would have adequate debt service coverage and make substantial contributions to their capital requirements from net internal cash generation (SAR Report No. 4771-CO, Section 5). By the time the Power Sector Adjustment Loan was agreed in 1987, the mismatch was prominently mentioned as one of the factors to which the financial difficulties of the power sector can be attributed. The President's Report for this loan mentions that the average term of sector debt is short (about 10 years) compared with the average life of power investments which normally exceeds 25 years, and that grace periods are much shorter than the construction time required for projects (Report No. P-4676-CO, para 61). As then analyzed, the resultant problems were considered

limited to the period 1987-90, years when the sector's debt service coverages would be marginally negative or barely positive (minus or plus about 9%). Under the financing plan designed for this period, it was expected that the sector's capital and debt service requirements would be met by supplementing internally generated funds with a large infusion of equity capital, mainly funded by the Bank's loan, and a borrowing program which was very large in gross terms but modest in net terms after allowing for debt amortization requirements. Implicitly, some of the foreign commercial bank financing included in the borrowing program would be used to refinance some outstanding debt. No such assistance was deemed needed for the years 1991-92, for which the projections indicated the debt service coverage would be 1.24 times (ibid, paras 99-101).

5.63 (ii) Need for More Ambitious and Systematic Term Transformation. In actuality, because most if not all the power companies have found it impossible to service their outstanding loans as well as meet all their other funds requirements, resort has been made to a series of ad hoc solutions. FEN's role in this context has included onlending the share, designated for the power utilities, of new foreign commercial bank loans obtained by Colombia to refinance current amortization payments falling due on them. Although this has effectively extended some principal repayments on such loans, it has only partially mitigated the problems confronting the utilities because repayment terms on their loan financing are too short. Peso advances to the power utilities to meet their foreign debt service requirements have also been provided from FODEX, but since the obligations to repay these advances were short or medium term, the relief they provided has been temporary. This conclusion apparently also is applicable to the CADEX program. Moreover, even the repayment terms of the domestic loans provided by FEN for investment purposes are too short: seven years including a grace period of one year.

5.64 The problems resulting from unsuitable repayment terms on borrowings are accentuated because, under the Bank's standard approach for measuring financial performance for purposes both of analysis and compliance with loan covenants, all debt service requirements, except for capitalized interest during construction, are counted to determine debt service coverage and contribution to expansion from net internally generated funds. In the case of the power sector in Colombia, as well as many other countries, this has resulted in a gross exaggeration of debt service requirements in relation to realistic measures of the reasonable earning power of the sector and individual utility companies. To apply effective and realistically achievable financial discipline to the performance of Colombia's power utilities, much more ambitious term transformation provided on a systematic and transparent basis would be needed. See para 8.19 (h) and Annex II for recommendations as to how this might be accomplished through FEN.

Financial Performance

5.65 Table 5.2 of Part III compares FEN's actual performance for the years 1983-1990 with the projections made at appraisal for the years 1983-1987 in terms of comparative balance sheets and the key financial indicators set forth in Annex 2.13 of the Staff Appraisal Report (No. 4771-CO). Previous sections of this report have dealt with FEN's financial performance in relation to its domestic borrowing and lending programs (paras 5.17-5.21), return on equity (para 5.46) and debt/equity ratios (para 5.49-5.55). The discussion which

follows related to Table 5.2 supplements the previous comments with particular focus on two of the ratios, gross spread and annual increment in net worth.

5.66 Gross spread (net income as a percentage of year end total assets) is a measure of profitability. Actual performance in this respect compared favorably with the appraisal estimates for 1983-1985 and unfavorably for 1986 and 1987. The drop in the actual spread from 4.4% in 1985 to 2.7% in 1986 (compared to appraisal estimates of 4.6% and 3.5%, respectively) continued in subsequent years to 1.4% in 1989 and 1.6% in 1990. The annual increment in net worth is another measure of profitability since virtually all of FEN's net income is retained as part of its net worth. Like the gross spread, the actual increments in net worth compare favorably to the appraisal estimates for the years 1983-1985 and unfavorably for the next two years. The substantial decline in FEN's profitability which occurred in the years subsequent to 1985 is indicated by the drop in actual annual increments of net worth from a range of 26% to 34% for 1983-1985 to a range of 17% to 18% for 1986-1989 and the recovery to 27% in 1990. This measure like the rate of return on equity (i.e. net worth) in Table 5.1, when compared to the rate of inflation, is indicative of the adequacy of FEN's profitability to preserve its capital in real terms. The inflation rates for each of the years 1986-1990, ranging from 19% to 29%, are shown in Table 5.1. As a result of the negative real rates of return earned on equity since 1985 (see para 5.46), there has been an erosion of about 11% in the real value of FEN's net worth from the end of 1983 to the end of 1990, excluding for this purpose the additional equity of Col$19,760 million paid in by the Government in December 1990.

5.67 The decline in FEN's profitability since 1985 is due to several factors:

First and foremost, FEN's exemption from income taxes terminated at the end of 1985.

Second, the lending rates for FEN's domestic loans were fixed for the full period of these loans (increased from five to seven years in June 1985 - see para 5.26) whereas its domestic borrowing costs were increasing from average annual rates of about 31% in 1986 to 37% in 1989 and 1990. The adverse impact this has had on FEN's profitability has to some extent been mitigated by the decline of the relative importance of FEN's domestic loans to its total income producing assets from 26% in 1986 to 9% in 1990. In 1989, when domestic loans were 13% of total income producing assets, FEN had a negative margin (i.e it had losses) on its domestic assets, and it changed its policy to link lending rates on domestic loans to its cost of money raised in the domestic capital market. (FEN report dated July 12, 1991, "Analysis Historico de los Estados Financieros ... Periodo 1986-1990" obtained by the Bank in April 1992.)

Third, FEN was required to include as part of its expenses in 1989 a provision of Col$752 million for the accumulated deficit in a fiduciary account it had been managing since November 1984 involving the administration of Social Security Reserves. A charge of Col$120 million was also made in 1990 for the loss on this account incurred in that year. The 1989 charge was equivalent to about 12% of its net

income for that year net of the charge. For further details, including the implications for FEN's future management of these resources, see Annex II, para 35 (vi).

It is clear that FEN's lending margins have been inadequate to maintain its earnings after taxes at a satisfactory level, namely at least sufficient so that when retained and capitalized the real value of its net worth is preserved. During project supervision, the Bank failed to suggest that an increase in margins would be required after FEN's exemption from income taxes was withdrawn; and it was not aware until recently of the inappropriate arrangements for FEN's domestic loans under which FEN was at risk for increases in the costs of domestic borrowings needed to maintain such loans until repayment. This is another illustration of the inadequacies which occurred in supervising this loan without participation of a staff member who was an expert on financial intermediaries and capital markets.

Project Risks

5.68 The two main sources of risks of the project were identified at appraisal, namely that (i) that the local currency share of investments would not be available in a timely manner and (ii) FEN would not be able to fulfill its role as a development banking institution. Both sources proved to have significant consequences. The inadequate local currency funding was due primarily to insufficient net internal cash generation, well below the appraisal estimates. The major factors accounting for this shortfall are (i) lower revenues resulting from unanticipated decreases in the real tariff level and from actual sales growth inferior to that foreseen at the time of the appraisal; and (ii) much higher debt service on foreign borrowings caused by very significant unforeseen changes in exchange rates, namely a substantial real devaluation of the Colombian peso in relation to the US dollar and of the US Dollar in relation to the basket of currencies (including the Japanese yen) determining the foreign exchange risk of World Bank loans. FEN was unable to fill the gap of local financing through mobilization of funds because it could not lend to the financially weak utilities through the financial system. This inhibited the ability of FEN to perform one critical function as a development banking institution: that of supplier of domestic financing through mobilization of funds in the local market. The capacity to instill financial discipline among its borrowers, another crucial function of a development bank, could not be developed by FEN either, because a key variable for achieving financial discipline - tariff adjustment - was not within its province and was not carried out by the responsible authorities in line with the loan covenants. Furthermore, there is no evidence that FEN has attempted to perform its mandated role to promote greater cost effectiveness among the borrowers through its conditionality, or that it has been instrumental in upgrading their accounting and control procedures. FEN has been more a passive outlet of funds to a deficit-ridden sector than a true development banking institution.

5.69 In both respects, the risks were substantially underestimated. As pointed out previously, the risks related to FEN's ability to fulfill its development banking role were dismissed too blandly in the staff appraisal and President's reports; in this respect, some of the difficulties FEN would encounter should have been foreseen, and many of the time targets established to achieve specific results were unrealistically short (paras 4.11, 5.11 and

5.14). The factors which resulted in the deterioration of the financial situation of many of the power companies, however, were not reasonably foreseeable when the loan was made.

Actions Which Affected Project Implementation

5.70 A major weakness in the Bank's supervision was the failure to assign to this activity a staff member who was an expert on financial intermediaries and capital markets. The effectiveness of the Bank's efforts to improve FEN's institutional capability would have been greatly improved had such a staff member been made available and participated in most, if not all, of the supervision missions. It would also have been appropriate to have designated such staff member as the projects officer. This staff member would have provided an element which was missing during the implementation of the project: an expert representing the Bank who would gain the confidence and respect of FEN officials and who would have provided continuity to the Bank's efforts to encourage and when necessary prod FEN to fulfill the broad development banking role envisaged for it. Also, had such a staff member been involved when the subloan arrangements were formulated, it is unlikely that the Bank would have failed to be aware of and deal with the significant mismatch between the repayment terms of FEN's borrowings for the project and of the subloans made from those borrowings. The effort of the responsible project division to obtain such assistance was unsuccessful. Regional management should have been more responsive; indeed, the need for this additional staff support for the project should have been recognized, and action taken to provide it, shortly after the decision to proceed with the project in January 1983.

5.71 On the Government's side, a major factor affecting implementation was the decision to let the real tariff levels fall after the 1985 devaluations (para. 8.3), since it had a direct bearing on the internal financing of the utilities. This resulted in the delay in implementation of the scheme which would have allowed FEN to take a more active part as a financial institution, lending local currency funds to the utilities, and as a development institution capable of imposing conditions that would improve the financial and managerial position of its borrowers. These two capabilities go hand-in-hand since the conditionality cannot be successful unless a permanent relationship is established with the borrower that would make it possible for FEN to demand actions that would be politically difficult to implement for the borrower, and that would make it worthwhile for the beneficiaries of FEN loans to comply. This relationship, and the role of FEN as a development institution as well, were elements lacking in the organization of the power sector in Colombia. It remains to be seen whether the efforts of the current Government to reinvigorate FEN will be successful.

6. MAJOR RESULTS OF THE PROJECT

Project Objectives

6.1 Of the two main project objectives (para. 3.1), the first was largely achieved, although with delays: to provide the external financing required to sustain during 1984-85 the scheduled construction pace of several high

priority electricity development projects. The support of foreign commercial lenders to the power sector and to Colombia, through a co-financing package was obtained only for this project. The expectation that there would be subsequent co-financed projects involving the "A" and "B" loan format did not materialize because the commercial banks withdrew from additional voluntary lending to Colombia and have limited new loans to Colombia to amounts equivalent to relending all or most of the amortizations due on their previous loans. Under this new strategy, however, FEN has served as the intermediary for the substantial amounts destined for the electricity companies (para. 4.7).

6.2 Little progress was made in achieving the second main objective to support the development of FEN in several respects: to serve as an effective channel for sector lending projects for power in Colombia; to monitor the financial performance of the utilities and to assist the strengthening of the power sector financial management; and to enhance its capacity to mobilize domestic savings.

6.3 FEN has not yet become an effective channel for sector lending projects for power in Colombia because it lacks the political and institutional clout to be an effective development bank and has not fully developed its technical and managerial skills to monitor and supervise the technically stronger utilities. As previously noted, the impact of the various project components designed to strengthen FEN's capabilities as a power sector development bank has been insubstantial (paras 5.8-5.12).

6.4 Because of the financial weakness of most of the electricity companies, there were severe constraints on FEN's ability to channel funds mobilized from the domestic capital market to the utilities through the financial system, without endangering its own financial stability (paras 5.16-5.20). This has greatly limited its proved capacity for mobilizing domestic savings to complement the internal generation efforts of utilities. Use of the government's guaranty as a way to circumvent this obstacle (see para 7.1) has been counterproductive since it becomes a way for the discreet encroachment of the utilities as dependents of the central government budget, and a permanent source of sector financial informality.

Economic Justification

6.5 At appraisal, the benefits of the project were presented in qualitative terms without quantifying a return on investment for the project (SAR No. 4771-CO, paras 4.13-4.14). The qualitative benefits identified were mainly those related to the project objectives, the achievements with respect to which are discussed in paras 6.1-6.4. In lieu of a quantified return on investment, the appraisal report stated that it has been established that the projects which are prospective subloan candidates would have higher internal rates of return than the 13%-15% estimated at the time of original Bank appraisal. This claim and approach have been criticized in a report issued by the Operations Evaluation Department dated June 28, 1990, Report No. 8893, Colombia - The Power Sector and the World Bank, 1970-1977, Volume II, Chapter 5, paras 56-62.

7. PROJECT SUSTAINABILITY

7.1 To ensure continued financing for the power sector through FEN, it is necessary that the Government define more clearly its role as a development banking institution and gives its full political backing to this role, so that FEN can become an effective instrument for policy implementation and control, and a positive element contributing to the planning and forecasting of the financial needs of the power (and energy) sector. The current Government has taken a number of actions to accomplish this, but as of this writing (June 1992) the efficacy of the steps taken is still uncertain. Prior to these recent changes, FEN had not functioned as a development bank since it lacked a base of credit-worthy potential borrowers and the capacity effectively to impose financial and policy conditionality on its borrowers to increase their credit-worthiness. It functioned merely as a window for quasi-fiscal spending of the government, which chose to support the power sector through capitalization of the financial losses arising from arrears and defaults of the power sector utilities. In part, this has been accomplished through relending to the utilities by FEN of its assigned share of external credits to the Government and of the additional equity capital investments in FEN made by the Government in 1990. This was done rather than supporting the financially weak enterprises more transparently through direct budget support. This policy choice negatively affects the sustainability of Bank sector financing through FEN and, more seriously, it undermines the accountability of FEN as a financial institution and its prospects for survival as a viable development banking institution. See para 9.1 for additional comments on the actions taken by the Government in 1990 to increase FEN's responsibilities and authority and how this may affect FEN's future prospects.

8. BANK PERFORMANCE

Major Strengths and Weaknesses.

8.1 The major strength demonstrated by the Bank in its handling of this project is its capacity and that of its staff to be innovative and respond promptly to the power sector's need for additional financing for ongoing projects. This was a very significant accomplishment and was achieved by (i) designing very quickly a project which served as a vehicle to provide supplementary Bank financing for previously financed Bank projects and also attract commercial bank cofinancing for these and other ongoing projects, and (ii) overcoming the institutional barriers for the flexible treatment proposed (paras 4.4-4.7). The Bank should also be credited for the very substantial effort involving over 100 staff weeks to assist in mobilizing the commercial bank cofinancing for the project (memorandum to files dated April 13,1984). Despite the limited progress made in achieving the project's institution building objective and the shortcomings in the Bank's performance noted in the next para, the project was a worthwhile undertaking. There was a genuine need for an institution such as FEN with the capabilities and responsibilities which the Bank envisioned when the project was proposed, and there is still such a need. Of course, it would have been preferable if the Bank had pursued the appraisal report vision of FEN more effectively, but the opportunity to do

so remains. The lessons learned in executing this project should be valuable in pointing the way to improved performance in the future.

8.2 The deficiencies in the Bank's performance are summarized below:

(a) During the design and appraisal stage, the urgency of proceeding quickly resulted in some proposals not in conformity with Bank policies for financial intermediaries (paras 4.13-4.15), Bank staff was slow in addressing the Bank's policy not to finance cost overruns except under special circumstances (paras 4.16-4.20), the design of the disbursement arrangements was inadequate (paras 4.21-4.24), and the financing requirements for the 1984-85 project period were overestimated (paras 5.1-5.7).

(b) The supervision of the project was not effective, indicating a lack of commitment of the Bank's technical staff with the project. This is reflected in

the relative complaisance of the supervision reports and the Bank's review of quarterly progress reports with the delays of the disbursements of the subloans (paras 5.5, 5.6 and 5.35);

the Bank's failure to maintain under this project continuous oversight of the performance of the utilities and the Government to meet the covenanted rates of return and other obligations set forth in the Power Financing and Guarantee Agreements (paras 5.31 and 5.35);

the inadequate response of the Bank to FEN's decision to extend the grace period of the subloans financed with funds obtained under loan 2401-CO and the co-financing agreements, without prior consultation with or consent by the Bank (paras 5.41-5.48);

the Bank's failure to obtain agreement on, and monitor during supervision, key financial indicators of FEN's performance (paras 5.24 and 5.25); and

the Bank's failure to be aware of, and request corrective action for, the decline in FEN's rate of return on equity and the consequent erosion of its equity capital in real terms (paras 5.28, 5.29 and 5.46).

(c) The Bank missed the opportunity to help establish FEN as a key planning and policy implementation instrument because it did not pursue the appraisal report vision of FEN as a full-fledged development bank for the power sector (paras 5.30 and 5.67).

(d) The Bank failed to recognize the need for much more ambitious term transformation than has heretofore been attempted by FEN in order to (i) have a better match between loan repayment terms and the earnings generated by the investments financed by the loans, and (ii) avoid the distortions that occur in measuring financial performance based on excessive measures of debt service requirements that result when it is

necessary to refinance debts incurred with repayment terms which were inappropriately short (paras 5.56-5.64).

Many of these deficiencies are attributable to the Bank's failure to assign a staff member who was a specialist in financial intermediaries and capital markets to be part of the team responsible for this project and relying instead on consultant services; the project's handling was also adversely affected at times during appraisal and supervision by the absence of a qualified power utility financial analyst (e.g. paras. 5.23, 5.24 and 5.47).

Unforeseen Foreign Exchange Risks.

8.3 FEN and other Colombian authorities have called attention to the very large increases in the project's debt service costs in both Colombian peso and US dollar terms over what was anticipated at appraisal. The substantial increases in debt service costs resulted from two sources: (i) the unexpected acceleration in the mid-1980s of the crawling peg adjustment of the value of the peso in relation to the dollar including a 51% devaluation in 1985 and (ii) the unanticipated substantial devaluation of the dollar vis-a-vis the Japanese yen (¥) and other foreign currencies such as the Deutsche mark (DM) beginning in 1985, which resulted in much higher debt service costs for the "A" loan under the Bank's currency pooling system and for the yen denominated "B" loan. Questions have been raised about the adequacy of the Bank's work because of its failure to provide solutions which would have protected the utilities and FEN against these unforeseen exchange risks. The discussion which follows, paras. 8.4-8.18, was written in, and reflects information on exchange rates available as of, mid-november 1991.

8.4 As of Dec. 31, 1987, before repayments of the project loans began in 1988, there was an increase of 61% in the US dollar amount of the "A" loan under the currency pooling system (from US$170 million to US$274 million) and an increase of 80% in the yen portion of the "B" loan (from US$25 million to US$45 million). The US$ portion of the "B" loan (US$175 million), of course, was not affected by the devaluation of the US$, but the Colombian peso cost of servicing it increased as a result of the unanticipated real devaluation of the peso in 1985. Since year end 1987, there has been a modest and uneven strengthening of the US$ against the other currencies in the currency pool; as of June 30, 1991, a date representative of the peak of that upward movement, the balance due on the "A" loan in US$ terms was 51% more than the unadjusted original principal amount (US$198 million compared to US$131 million). More recently, there has been some weakening of the US$ so that as of September 30, 1991, the balance due on the "A" loan in US$ terms was 57% more than the unadjusted original principal amount (US$195 million compared to US$124 million). Compared to the exchange rate of ¥123 per US$ as of the end of 1987, the rate improved somewhat in favor of the US$ during 1988-90. At its best during 1990, however, when the exchange rate averaged 145 to 1, the additional US$ equivalent costs to service the yen portion of the "B" loan were about 50% more than had the 220 to 1 rate in effect when the loan was arranged been applicable. The yen has strengthened during 1991, and at the rate of 130 to 1 applicable in mid-November 1991 the US$ value of the remaining balance due on this loan is about 70% higher. It is clear that the interest costs and debt repayment obligations on the project loans, measured in Colombian pesos and US$, have increased markedly over what was expected when the loans were made and have imposed a much higher debt service burden on

the power companies than then anticipated. This effect is compounded by the impact of other foreign currency loans on the utilities' finances. It has been estimated, for example, that the mid-1980s accelerated devaluation increased the financial expenses of EEEB by threefold and of ISA by 60%.

8.5 The Bank's official inflation and devaluation projections for 1983-87, which were adopted in consultation with Colombian authorities and utilized for the project appraisal, did not foresee an adjustment of the real exchange rate, although its index showed at the time (1983) that it had revalued by about 30% against its level of 1974-75, which was considered adequate in terms of the trade policy objectives. This was public knowledge, and it did not require an elaborate forecasting methodology to predict that a major nominal devaluation would take place in the following years. The Colombian government, however, had committed itself to a policy that precluded a maxi-devaluation. Given this commitment, most analysts agreed at that time that the real devaluation that was needed could not be achieved in the short run, and the solution was assumed to take place, more or less gradually, over the medium-run. It came as a surprise, therefore, when a new Minister of Finance achieved the exchange rate adjustment within a year, in 1985, by means of accelerating the "crawling peg" to a level of about 50% p.a. that had not seemed possible. Thus, although the Bank and other analysts were aware of the need for adjustment, the failure to forecast this maxi-devaluation should not be deemed a weakness in the forecasting, which was internally consistent and took into consideration the information available about future policy. The maxi-devaluation was an event which was not reasonably foreseeable in 1983 and early 1984, the period when the project appraisal was completed and the loan was negotiated and approved. This is also the case for the very substantial devaluation of the US$ against other currencies included in the Bank's currency pool which has occurred subsequent to mid-1985.

Hedges against Maxi-Devaluation of the Colombian Peso

8.6 The Bank has been criticized, not for mistakes in its forecasts of inflation and devaluation, but for its failure to provide contingent fall-back mechanisms to protect against a major adjustment of the real exchange rate, an event that, it is asserted, was likely to occur and that would upset the entire financial scenario for the power sector, a producer of non-tradeables par excellénce. It is contended that the proper path would have been to secure from the central bank adequate market-priced hedging mechanisms against a maxi-devaluation, and against the devaluation of the dollar relative to other currencies, so that the borrowing utilities would have only had to bear the risk of the normal "crawling-peg" devaluation of the peso against the dollar. It is also asserted that if these mechanisms had been in place, the financial costs of the foreign indebtedness of the utilities would have been kept within bounds, instead of the much greater burdens indicated in para 8.4.

8.7 Insofar as this criticism implies that the suggested hedging mechanisms should have been arranged during the design and appraisal stages of the project and agreed during negotiations, it is untenable. As noted in para 8.5, there was little or no basis then to expect either the maxi-devaluation of the Colombian peso in relation to the US$ or the major devaluation of the US$ in relation to other currencies. Accordingly, as of 1983 and early 1984, it is inappropriate to characterize the possibility of either of these events

occurring as "likely" and to expect that attention should have been given to the availability of hedging mechanisms if they did.

8.8 Moreover, with respect to a hedge against a maxi-devaluation, the practicability and merits of this suggestion are questionable. The Government undoubtedly would have rejected and refused to consider such a proposal at a time when it was committed to a policy of gradual rather than abrupt adjustments in the real exchange rate. In any case, it is unclear how the equivalent of an "adequate market price" for such a hedge would have been determined. If the principles for pricing hedges in competitive foreign currency markets were followed, the forward price for purchasing dollars with pesos would be determined by increasing the spot market price by the ratio of one plus the interest rate payable to borrow pesos (actually or implicitly used to acquire dollars at the spot rate) to one plus the interest rate which would be earned (actually or implicitly) on the dollars to be delivered in the future. This basis makes no allowance for any changes in exchange rates other than those implicit in the differential interest rates. Any allowance for a possible change in the real exchange rate would have to be arbitrarily determined, and it is doubtful that this arbitrary determination would be adequate to compensate fully for the devaluation. The Government and the Central Bank would also be under pressure to provide similar protection against a real devaluation from all other creditors exposed to this risk and not limit it to producers of non-tradeables such as the power companies. Thus, a policy under which the Central Bank would have provided special protection against a maxi-devaluation is probably one under which there would have been a significant shift of the costs of servicing foreign debts from the borrowers who incurred the debts to the economy at large. The preferable policy is to allow these costs to be borne fully and directly by the borrowers and indirectly, to the extent that the borrowers are able to pass them on, by their customers. To the extent that the Government determines exchange rates, its fundamental policy should be to avoid so far as possible the occurrence of over or under valuations of the rates and the corresponding windfalls or shocks which those who earn or who borrow or use foreign exchange experience when the exchange rates are distorted and subsequent steps are taken to correct the distortions. Also, Government policy should not prevent regulated utilities from passing on increases in debt service costs resulting from devaluations (para. 5.71).

Hedges against Major Devaluation of US$

8.9 Because of the availability of very large and highly competitive currency markets involving future exchanges of the US$ and other major country currencies, hedging strategies to limit the currency risks on the project loans in relation to the US$ were feasible. It appears that these could have been implemented by the Central Bank at relatively modest transaction and other costs, assuming that Colombia would have been deemed to be a credit worthy party and therefore that high credit risk premiums would not have been charged. In retrospect, it is clear that such hedging would have been much preferable than simply accepting the uncertain exchange risks implicit in foreign loans denominated in whole or in part in currencies other than the US$. As stated in para 8.5, however, the need for such hedging was not apparent in 1983 and early 1984 when the project appraisal was completed and the project loans were negotiated.

8.10 The remaining issue is whether subsequent to approval of the project loans in early 1984, and if so when, the risk of major and long-sustained devaluation of the US$ became so evident that the Bank should have recommended that Colombia adopt, or consider adopting, a policy to offer market priced hedging mechanisms against the devaluation of the US$ through the central Bank. That issue, of course, pertains not simply to the project loans but also to all non-US$ denominated foreign loans to Colombian borrowers, and not simply to Colombia but to all Bank borrowers. A related question is whether and when the need for such hedging mechanisms should have become evident to the Government and the central bank independent of any advice from the Bank.

8.11 There are no simple clear answers to the questions posed in the preceding para. The turning point in a long sustained period in which the US$ strengthened against other currencies occurred about mid-1985. It is very unlikely that anyone would have been aware of this turning point precisely when it happened. In September 1985, however, a formal announcement was made at a meeting of the US and six other industrialized countries that they intended to devalue the US$ in relation to other currencies including the ¥ and the DM in order to stem the widening US trade deficit. The currency markets are so huge that what happened subsequent to this announcement is mainly attributable to market forces and only partially to the intervention of government agencies implementing government policies. Thus, the September 1985 announcement should be considered an event which put the Bank and its borrowers on notice that a devaluation of the US$ was likely.

8.12 From the beginning to the end of 1985, the exchange rate of the ¥ to the US$ moved from 251 to 201, or an increase of 25% in its US$ value, but the average exchange rate for 1985 compared to 1984 was virtually unchanged at about 238. Similarly, the DM rate to the US$ moved from 3.15 to 2.46 from the beginning to the end of 1985, representing an increase of 28% in its US$ value, but the average rate for 1985 compared to 1984 was virtually unchanged at about 2.9. There were continued annual increases in the US$ value of these currencies ranging from 23% to 28% in 1986 and 1987, which by then were also reflected in declining average exchange rates and increasing average US$ values for these currencies. Since 1987, there has been an uneven, modest strengthening of the US$, with movements up and down in the exchange rates within a relatively narrow band. It is noteworthy that the range in variation of the exchange rates during this period is applicable back to January 1987. Using monthly averages for the period from January 1987 through September, 1991, the rate per US$ for the ¥ has varied from about 123 (November 1988) to 158.5 (April 1990), or a ratio in terms of US$ values of 1.29 to 1; and the rate for the DM has varied from about 1.48 (February 1991) to 1.99 (June 1989), or a ratio of 1.35 to 1.

8.13 In retrospect, it would seem plausible to have expected that (i) the Bank and its borrowers would have begun an assessment of the consequences of the devaluation of the US$ announced in September 1985 shortly thereafter; (ii) the problems caused by the declining values of the US$ in relation to other major foreign currencies would have been recognized by 1986 or 1987 at the latest; and (iii) consideration would have been given during this period to adoption of hedging mechanisms to limit the effects of the devaluation. In fact, the problems were recognized by Colombian (and other) borrowers who were very critical of the resultant high cost of Bank loans and other non-US$ denominated foreign loans. There were no suggestions, however, either from

Bank or Colombian sources that offsetting hedging mechanisms might be advisable until the announcement of the adoption by the Bank of new currency management policies in January 1989. The Colombian criticism, mentioned in para 8.6, concerning the Bank's failure to secure from the central bank market-priced hedging mechanisms against the devaluation of the dollar, was made in 1990, but it apparently was not related to or stimulated by the new currency management policies instituted by the Bank in 1989.

The Bank's New Currency Management Policies

8.14 The new policies, which were adopted after more than a year of study, were designed to alleviate difficulties which Bank borrowers (and not simply Colombia) had experienced. They were intended to make the currency composition of Bank loans more transparent and manageable both for loans made since July 1, 1980, which were subject to the currency pool, and the fixed currency loans made prior thereto. The composition of the currency pool was to be targeted so that for every dollar in it there would be 125 yen and 2 Deutsche marks (or the equivalent of 2 Deutsche marks in a composite of Deutsche marks, Swiss francs, and Netherlands guilders, three currencies whose exchange rates had a tendency to move closely together). These targets were expected to create approximate balance among the three currency groups which would account for 90-95% of the currency pool. Previously, the currency composition of the pool had varied greatly since its inception. The fixed targets would enable borrowers to manage pooled loans as families of subloans, one in each targeted currency. Budget planning would be more effective, and hedging would be facilitated for borrowers with ready market access who wished to transform the nature of their foreign exchange exposure should that be desirable in the context of overall liability management. The fixed target ratios for the currency pool were to be achieved by July 1, 1991, but progress achieved by July 31, 1989, was so considerable that changes in the target basket matched changes in the currency pool very closely. Under the new policy for fixed currency loans, currency recalls for amortization payments on each such loan would be made on a pro rata basis. This would eliminate the uncertainty as to what currencies would be called which had previously caused serious budget and foreign exchange planning problems for borrowers. As in the case of the pooled loans, borrowers would be able to treat the fixed currency loans as families of subloans in the constituent currencies, and borrowers with ready market access could transform currency risk using hedging techniques. (Papers entitled "Questions and Answers on the World Bank's New Currency Management Policies" and "Transparency Presentation on the World Bank's New Currency Management Policies" issued by the Office of the Controller, September 1989.)

8.15 A paper issued by the Bank shortly after the adoption of the new policies contains a detailed discussion of the instruments and techniques available to hedge currency risk, including forwards, futures, options and swaps ("Anticipating and Hedging Debt Service Payments on World Bank Loans", Office of the Controller, September 1989). Among other points made, this paper pointed out that aggregating hedging on several loans would be advantageous because better pricing is available for large amounts and because this would be less burdensome administratively. The paper suggests that one way to accomplish this is for the central bank to hedge on behalf of many borrowers. In addition to the guidance and advice provided by this paper, it and the "Question and Answer" paper referred to in the preceding para stated that, while the Bank itself will not be able to provide hedging services to

borrowers, technical assistance on a limited basis is available from the Bank and that advice is also available from private sector firms with expertise in this area.

8.16 There was no direct follow up, either by the Bank or Colombian authorities, to the suggestions in the papers noted above that it may be advantageous to manage proactively the foreign exchange risk inherent in World Bank loans using market hedging techniques. The lack of interest in considering hedging in the period since 1989 was not limited to Colombia; the Bank received no requests for technical assistance on this subject. This lack of interest may have reflected a view that the devaluation of the US$ had been excessive and that the US$ was likely to strengthen in the future, so that it was unnecessary to incur the costs and the administrative burden of hedging. Such a view would be supported by the general opinion that the US$ had become undervalued in relation to other major foreign currencies on a purchasing power parity basis. In addition, the lack of interest may have been due to an inadequate dissemination or understanding of the options available for, and the potential benefits and costs of, hedging currency risks. More recently, staff of the office of the Treasurer have been involved in providing technical assistance on hedging to Bank member countries. The scope of this activity and its current status have not been reviewed for this report.

8.17 To sum up, it is not appropriate to criticize the Bank for failing to include, as part of the project design, hedging arrangements which would have protected project borrowers against, or softened the impact on them of, the devaluation of the US$ in relation to other foreign currencies. It may be fair to criticize the Bank for taking too long to formulate its institutional response to the problems resulting from the devaluation of the US$ subsequent to mid-1985. Even if the Bank had formulated that response sooner, say two years earlier, by January 1987, one cannot be certain that a decision would have been taken to begin hedging shortly thereafter or whether the decision would have been to do nothing as was the case after the January 1989 announcement of the Bank's new currency management policies. It is inappropriate to criticize the Bank's regional staff responsible for supervising this project for failing to react to the devaluation of the US$ which began in 1985 and failing to suggest that hedging against the devaluation should be considered. Very few Bank staff had any expertise in this specialized and complex subject, and it would have been purely coincidental if such a staff member were part of the project team or of the regional management concerned with this project.

8.18 Consideration should be given to undertaking retrospective studies of what might have been achieved and at what cost had hedging against the devaluation of the US$ in relation to other foreign currencies been implemented for the project loans treated in the aggregate. Although these would serve only as one illustration of the costs and benefits of such hedging, such an illustration should be a useful complement to the theoretical basis for determining whether, when and on what basis it may be advisable to undertake hedging and how to evaluate the risks involved. The studies could test a variety of assumptions: different starting dates, e.g. from the beginning of project implementation shortly after loan effectiveness, mid-1985, January 1, 1987, and mid-1989; different techniques, forwards, futures, options, swaps and, perhaps, some combinations thereof; differences in the extent of coverage, e.g. in addition to full hedging, various approaches to

partial hedging such as are suggested in the Bank's "Anticipating and Hedging Debt Service Payments" paper; and the combined approach using options strategies to hedge the ¥ and DM together which that paper states is less costly. Instead of attempting to mirror the fine tuning that might have been undertaken to take account of the changing currency composition of the currency pool, a simplifying assumption could be used, like the fixed "reflecting pool" that closely tracked the full pool and which is described in the "The World Bank's Currency Pool" (October 1988). The simplifying assumption could include a switch in the latter part of 1989 to the targets adopted under the Bank's new currency management policies as the basis for hedging the "A" loan. Both the Bank and Colombia would benefit from the retrospective studies. At least as an initial check, the information obtained would be useful to the Bank to determine whether changes were needed in its policies and procedures for interacting with its borrowers on the subject of hedging the currency risks on foreign loans, and to Colombia in determining the country's policies in this respect.

Lessons Learned.

8.19 The principal lessons learned, with implications for other projects of the same nature, as a result of the analysis of the preparation and implementation of this project and of subsequent events relevant thereto, are the following:

(a) Emergency Financial Packages; New Lending Models.

(i) A special procedure could be established by the Bank for dealing with emergency financial packages under specific conditions, so that ad hoc arrangements would not have to be devised as was the case for this project.

(ii) When new lending models are being implemented, particularly as exemplified by this project when they involve an early application of a new cofinancing scheme in the success of which both the Bank and its borrowers are highly interested and when they are part of an emergency package for a client sector:

more rather than less financial analysis should be applied;

and the financial and institutional aspects should be more closely supervised, particularly if the technical component is weak. Such supervision should be entrusted to Bank staff and not delegated to consultants.

(b) Institutional Development.

When a principal objective of a project is to assist a newly created financial intermediary to serve as a development bank for a capital intensive infrastructure sector and strengthen its financial management, major responsibility for the Bank's activities during the design, appraisal and supervision stages should be assigned to a staff member who is an expert on financial intermediaries and capital markets. Key financial indicators to be monitored should be agreed during appraisal. When there are

shortfalls in performance, appropriate follow up action should be taken to see that corrective measures are adopted.

(c) Projects Involving more than One Sector.

When projects involve more than one sector and the staff expertise required for the different sectors work in separate divisions, Bank management must ensure that there is adequate cooperation and coordination between or among the divisions so that staff experts who should be involved in appraisal and supervision of such projects are made available when needed. The Bank should be more agile in forming multi-disciplinary teams across division lines when needed and not attempt to compensate for organizational rigidities by using consultants.

(d) Realistic Scheduling.

When establishing dates to be specified in loan covenants for carrying out studies and accomplishing institutional improvements, be realistic in estimating the time needed and avoid setting overambitious targets.

(e) Disbursement and Reporting Requirements.

When disbursements are to be made on the basis of advances into a special account, and the subsequent actual use of the loan funds for project purposes is to be accounted for by disbursement from the special account, it is essential that the appraisal report estimate the rate of expected disbursements on both bases. Disbursement arrangements from the special account and reporting requirements should be designed so that they provide a basis for confirming that the financing was used for the intended purposes such as foreign costs, and that other limits or requirements were observed such as the amount of and time limits for retroactive financing. Staff should make sure that the Borrower arranges for the required audit of statements of expenditures (paras 4.21-4.25, 5.34 and 5.36).

(f) Leniency.

There are no advantages to be derived from showing leniency in the event of non-compliance with loan covenants. In the case of this loan this is particularly critical, especially with regard to FEN's failure to carry out various commitments designed to enhance its financial planning and advisory capacity (paras 5.10-5.12). Less leniency would have stimulated more the institutional strengthening of FEN as a development banking institution.

(g) Hedging Foreign Exchange Risk.

The Bank should reconsider its role with respect to the devastating effect that foreign exchange movements can have on the financial position of borrowers, particularly on producers of non-tradeables such as the utilities, in the absence of hedging

mechanisms against this risk. The question which should be addressed is whether the Bank is doing all that it should to assist borrowers to address this issue appropriately, including provision of adequate technical assistance and advice to do so. In the case of Colombia, the role of the central bank should be reviewed in this context, since it should be able to provide advice about the costs and potential benefits of hedging and to coordinate and consolidate hedging activities on an economical and efficient basis for borrowers who desire to hedge. Until recently, the Central Bank monopolized all foreign exchange transactions as a result of the exchange control regime (Decree 444 of 1967), but this is no longer the case (see para 5.61).

(h) Extended Term Transformation.

The feasibility of extending FEN's term transformation role should be studied in collaboration with Colombian authorities so that the burden of debt service requirements on Colombian power companies is realistically, reasonably and transparently related to their earning power. This subject is discussed further in Annex II.

9. BORROWER PERFORMANCE

Major Strengths and Weaknesses

9.1 The major strength shown by FEN as a result of this loan was its proved ability to mobilize financial savings in the domestic market through innovative and suitable short- and medium-range instruments. It also developed the ability to collect financial information from its client utilities and to aggregate it into financial forecasting models for the power sector. According to FEN management, these models are working and enable the institution to obtain the information it needs to be a prudent lender in a financially weak sector. In the opinion, however, of the staff of the Bank and the IDB, as well as other independent observers, the models and the information are very deficient and must be improved. There are even questions about the justification of having this information processed by FEN and not by ISA or a technical secretariat of the newly created Commission Nacional de Energia. Undoubtedly, FEN needs this information if it is ever going to become a well functioning development bank for the power sector. Since it has developed the channels for the collection and processing of financial data from the utilities, a practical and perhaps the best solution would be to leave this responsibility with FEN but require it to improve the process and the financial forecasting models. The major weaknesses of FEN are or have been as summarized below:

(i) It did not adequately improve its technical and managerial skills to serve as a power sector development bank in such respects as the ability to evaluate loan proposals and monitor the implementation of projects for which it provides financing, and to serve as a power sector financing strategy advisor to the Government and the utilities.

(ii) It has not had enough political or financial clout to impose a conditionality among its borrowers that would instill financial discipline in the system. Laws 25 and 51 of 1990 not only expanded FEN's lending functions to include refinancing debt service obligations in order to rationalize the functioning of the energy sector, but also authorized FEN to determine the terms and conditions that borrowers must meet to be eligible for FEN's loans (para 5.56). This gives FEN both the responsibility and the necessary financial clout to ensure that its borrowers make significant and timely progress to remedy deficiencies as a condition of continued financial support from FEN. Assuming that the Government does not interfere with FEN's conduct for political reasons, FEN's future success depends on how good its judgment is in applying its authority to impose conditionality.

(iii) It has been limited in its capability to supply the sector's needs of local funds, not by its savings mobilization potential, but by the financial weakness of the potential borrowers that are not credit-worthy. This is no longer so since the adoption of Law 51 in December 1990, which authorized FEN to provide Col$ credits without a bank guaranty or rediscounting. Under this law, FEN must be prepared to take the full risk of bad loans and, as stated above, if it is to be successful, it must see to it that its borrowers correct their weaknesses as a condition of its lending.

(iv) The Government has not viewed FEN as a full-fledged development bank for the power (or energy) sector but rather as an instrument for quasi-fiscal spending by means of capitalization of the institution to compensate for losses derived from lending to bad credit subjects. This could contain the seed for FEN's future disarray, since it obfuscates the financial picture of the institution and diminishes the accountability of its management. The actions taken in 1990 to increase FEN's responsibilities are indicative of a change in the attitude of the Government. The Government now expects FEN to act as an effective development bank in support of government policies to improve the functioning of the power sector. FEN is to assist in the formulation of performance or management contracts which the power companies would enter into with the Government and which would detail measures to be taken by them to improve their efficiency. Fulfillment of these contracts will be supervised by the government, and continued access to FEN credits will be conditioned on compliance with these contracts. Companies owned by the national government which fail to comply with the contracts are to be subject to restructuring or liquidation. (FEN's 1990 Annual Report, English version, pages 8 - 9.)

(v) No major restructuring exercises of ICEL, CORELCA and their subsidiaries have been carried out, although they are the least credit-worthy borrowers of FEN. Under FEN's supervision, studies have been made to determine what should be done to improve the operations, financial performance and management of these companies. Following amendment of the Colombian constitution in June 1991, legislation is being prepared pursuant to which these companies would be reorganized. Although there now is a reasonable prospect that this will be accomplished in the near future, the overall time taken to effectuate

improvements in the performance of these companies has been unduly long.

Lessons Learned

9.2 The major lesson learned is that the financial problems of the power sector cannot be solved merely by the creation and maintenance of a specialized financial intermediary such as FEN. Until December 1990, FEN's managers, acting responsibly as prudent bankers, relied on bank guaranties or rediscounts as security for Col$ lending to the power companies, and this limited the availability of such assistance to the companies that were credit worthy. Also, all of FEN's foreign lending to the power sector has required a government guaranty, and this is still the case. This guaranty may or may not be honored. If it is honored, it contributes to the financial disarray of the sector and to the widespread undiscipline. If it is not honored, it taxes the financial structure of FEN and will lead to its eventual surrendering of independence -e.g. to giving up its role as a bank. The potential of FEN as an agency capable of mobilizing funds to the power sector in the domestic market and internationally will be largely wasted unless the utilities are restructured so that they may become credit-worthy borrowers on their own right, and this cannot be accomplished without a thorough reorganization of the sector.

10. PROJECT RELATIONSHIP

10.1 Although the relationship between the Bank and FEN was harmonious at all times during implementation of the project, the involvement of the Bank's staff with the borrower was lacking in the sense that no interest permeated regarding the institutional performance of FEN or the role to be played by this institution in the development of the power sector. The attitude of the Bank towards FEN has been of benign neglect, which has not been conductive to institutional development or strengthening. This is attributable to the Bank's failure to assign a staff member who was an expert on financial intermediaries and capital markets to participate in the design and supervision of this project (para 5.70)

10.2 FEN's relationship with the government has not been successful in the sense that the institution has not been able to define a strong role for itself in the organization of the power sector.

10.3 FEN could improve substantially its information gathering process and its ability to deal with the financial problems of the utilities if it could induce them to accept and apply uniform and standardized accounting procedures and to adopt a standardized management information system. This is particularly critical in the case of ICEL.

11. CONSULTING SERVICES

11.1 Consultants played a relatively small but potentially significant role for several key aspects of the project. FEN hired the local consulting firms

of Mejia, Millan y Perry and FEDESARROLLO to develop a financial forecasting and analysis model -ENE and to carry out a study on sector finances and formulate a proposed financing strategy (para 5.10). In submitting their draft report, the consultants recommended additional work and improvements to complete development of the model. The need for this further work was endorsed by the Bank in its comments on the draft report which concluded that the model, when perfected, would provide a suitable basis for the periodic review of the financial prospects and strategies of the power sector (letter dated February 5, 1986). It is uncertain what action FEN took to carry out these recommendations (para 5.11). As pointed out in para 9.1, there are conflicting views on how effective the model has been.

11.2 An individual consultant, Renato Salazar, was retained to assist in improving FEN's project analysis and monitoring capacity. His work was competently performed and his report was well received by the Bank which endorsed his recommendations. Although FEN implemented the recommendations, it has to date not developed independent appraisal capacity which was one of the objectives of the project (para 5.9). This, plus the delay in retaining this consultant and the limited use made of the funds provided under the loan for this assistance, are another indication of a lack of genuine commitment by FEN to the objective of strengthening its capabilities as a development bank for the power sector (see para 4.9).

11.3 A study of the capital markets in Colombia with recommendations for FEN about alternative instruments to mobilize savings in the domestic market on a medium and long term basis was conducted by the local consulting firm Servicios de Informacion Ltda. An individual consultant retained by the Bank, Celestino Carbajal, also submitted a report which analyzed options to issue longer term securities which FEN might use to raise resources from the domestic market (para 5.15). These studies and their conclusions were not utilized since FEN was unable to develop resource mobilization to its full potential (paras 5.16-5.20). The legal and regulatory changes made in 1990 have greatly expanded FEN's responsibility and authority to raise funds from the domestic market, and the amount so raised increased dramatically in 1991 (paras 5.56-5.61). As a result, these studies should be of significant utility to FEN for its future domestic borrowing activities.

12. PROJECT DOCUMENTATION AND DATA

12.1 The data relevant for the preparation of the PCR for the most part were readily available. There are a few serious gaps in the documentation contained in the files. Copies of some incoming letters and information submitted by FEN or the Government were missing, apparently because staff had not sent them to the official files. Minutes of the negotiations were not available. This report had to rely on information contained in FEN's Final Report for some of its statistical information and on the files of the power sector projects for data on the status of compliance with covenants in the Power Financing Agreement.

12.2 There was no agreement during negotiations on the key financial indicators to be monitored during project implementation. Through an oversight, the intention to reach agreement on these indicators during the

third supervision mission was not implemented. In future projects and consistent with established Bank practice, agreement on all key indicators for monitoring project performance should be reached during appraisal.

12.3 It proved to be impractical to obtain reporting which would compare actual to estimated project costs on the basis of the definition of project costs used for the appraisal (paras 5.37-5.39). In the future, arrangements for the collection of such data should be made prior to presentation of a project for Board approval. In addition, the design of disbursement and reporting requirements should be improved so that actual uses of loan funds, including subloan funds, could be compared with estimated uses more substantively than proved to be possible in this instance (para 5.36).

12.4 In dealing with a borrower such as FEN which relies on short term borrowings for a substantial part of its capital requirements, the definition of debt to be used in a debt/equity limitation covenant should exclude normal short term liabilities (para 5.52).

PART II: PROJECT REVIEW FROM THE BORROWER'S PERSPECTIVE

Background

1.01 In compliance with Section 3.03 (b) of the Loan Agreement, the Borrower prepared and sent to the Bank a completion report of the project. Based in part on this first report, the Bank prepared a preliminary draft PCR and sent it for comments to the Borrower. By letter of January 3, 1992, the Borrower sent its comments which were received at the Bank on January 8, 1992. Due consideration has been given to these comments in the preparation of the final text of Part I of this report.

1.02 The completion report prepared by the Borrower titled " EVALUACION FINAL DE LA EJECUCION DEL CONTRATO DE EMPRESTITO FEN-BIRF (2401) - BANCA COMERCIAL," gives an overview of the evolution of the sector economic indicators and a descriptive account of the preparation and implementation stages of the project. For future reference, the Borrower's report has been included in the project file.

1.03 To reflect the Borrower's views on the main achievements and lessons learnt, this section contains English translations of:

a) the Table of Contents; Introduction, Achievement of Overall Objectives of the Loan; and Conclusions of the Borrower's report; and

b) the full text of the Borrower's letter of January 3, 1992; Annex 3 contains a copy of the original text of the letter.

2.0 Translation of Selected Sections of the Borrower's Report

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2.02 Borrower's Report - Introduction

INTRODUCTION

In accordance with Agreement 2401-CO, signed on June 27, 1984 to govern the FEN/World Bank/Commercial Bank cofinanced project, the purpose of this report is to furnish the World Bank with an evaluation of loan execution.

To this end, the report first presents an overall analysis of recent financial developments in the Colombian power sector.

Second, it presents the organizational structure of Financiera Eléctrica Nacional S.A. (FEN), with a breakdown of its shareholders, financial resources, overall lending programs, and its future prospects after the restructuring and capitalization process through which it will become Financiera Energética Nacional S.A. (FEN), with a broader range of activities and management.

Finally, the implementation of the cofinanced project is evaluated, with an examination of the background to the Agreement, its overall implementation, the distribution of the financing by enterprise, financial conditions applied to the subloans, the achievement of overall objectives, the impact on FEN's financial position, the revaluation of the loan amount because of the effects of the basket of currencies, and the achievement of the objectives of the specific subprojects financed.

2.03 Borrower's Report - Achievement of Overall Objectives of the Loan

Achievement of Overall Loan Objectives

Basically, the loan had the following two major objectives: first, to provide financial support for energy enterprises to enable them to complete the construction of power generation, distribution and transmission projects, in a cofinanced operation supported by commercial banks.

Second, it was to support the development of FEN (Financiera Eléctrica Nacional S.A.), enabling it to become an effective means of channeling finance to the sector and to increase its capacity for mobilizing domestic savings and providing access to future external borrowing.

An examination of the implementation process shows that these objectives were entirely achieved, since the financing contributed toward the completion of a number of generation, transmission, subtransmission and distribution projects, as will be shown later.

As regards FEN, it increased its lending activities and became the most important financing agency in the sector, as is reflected in its financial position. A brief analysis of this follows.

2.04 Borrower's Report - Conclusions

CONCLUSIONS

1. FEN made satisfactory progress as a financial intermediary.

2. The resources were fully disbursed and made it possible to implement a large number of projects that are now generating revenue for the enterprises concerned.

3. Nevertheless, the power sector as a whole was prevented from achieving overall positive results by the structural problems of inadequate net internal generation and the high level of external indebtedness.

4. The change in the value of the loan as denominated according to the World Bank/IDB basket of currencies had a considerable impact, coupled with the high rate of domestic devaluation over recent years.

5. Internally, FEN was consolidated as a financial agency. In the private investment market it firmly established various types of security with different maturities, gaining public acceptance and confidence.

6. In light of its success and the need to increase its sphere of activities, it is shortly to become Financiera Energética Nacional S.A.

3.00 Borrower's Comments Sent by Letter of January 3, 1992

FEN: FINANCIERA ENERGETICA NACIONAL S.A.
Office of the President
Santafé de Bogotá D.C.

January 3, 1992

Mr. Graham Smith
Division Chief, Infrastructure
and Energy Operations
Country Department III
Latin America and the Caribbean
Regional Office
World Bank
Washington, D.C.

Dear Mr. Smith:

I wish to make the following comments on the Project Completion Report regarding Loan 2401-CO to FEN:

1. Paras. 3.01, 4.01 and 4.05 [now 3.1, 4.1 and 4.5]: As regards the objectives of the loan, the Report emphasizes that, from its establishment, FEN was to act as a development bank. Although at appraisal and during the negotiations on the draft Agreement this was mentioned as one of its several purposes, far more importance was attached to the objective of supporting Colombia in its efforts to increase energy supply to the necessary level for supporting development and increasing employment. Consequently, the basic purpose discussed at that time was to ensure that the necessary projects for increasing power supply could be executed, so that rationing could be avoided. We do not believe that the advisory missions to FEN in June and November 1982 made any headway in establishing FEN as a development bank, because the agency only began to operate at the end of 1982, and its main concern then was its capitalization (in the form of resources from the Electric Power Development Fund managed by Banco de la República). According to our records and institutional memory (i.e. our "oral tradition"), FEN's beginnings were very different from the account presented in the Report. At the same time, other activities undertaken initially were the mobilizing of domestic savings and the transfer of resources through rediscounting, rather than the formation of an entity to be responsible for the control and financial coordination of the sector.

2. Para. 4.08 [now 4.8] (FEN's Role): In view of the above, it is not valid to assert that developing FEN's role as a development bank was one of the major components of the project. In fact, the main effort was devoted to achieving the objective identified in (1) above, and FEN was regarded more as a mechanism for channeling resources to the

utilities, initially in local currency and subsequently in foreign exchange. It was only three or four years later that steps were taken to direct FEN toward the activities referred to in the Report, i.e. controlling and managing the sector's finances.

3. Para. 4.09 [now 4.9]: One of the factors leading to this situation was ISA's role in the power sector at that time. Certainly, the National Government, and particularly the Ministry of Mines and Energy (together with the Bank itself), showed considerable hesitation over whether FEN was to take over ISA's controlling and coordinating role from the outset. In the event, ISA continued to be responsible for the technical and financial coordination of the sector from 1983 to 1986, while FEN devoted itself to obtaining the resources required by the enterprises for carrying out their expansion plans.

   As a result, conditions in FEN, the Government and the Bank itself did not favor granting the new agency a leading role in controlling the sector's finances.

4. Changes in the management of the sector were very gradual. As the Report points out, the Government took a decisive role in the planning process for expanding the power supply system for the first time in May 1983, when CONPES discussed the matter. It was then considered that the increase in power demand would be considerably below the sector's projections and that consequently the construction of new generating projects could be postponed for some time. It was also the first time that the necessary links between power development and macroeconomic planning had been mentioned, and that the financial constraints arising from the high level of indebtedness had become evident.

   The result is that only one new project has been begun since that year, i.e. the Riogrande II hydropower plant, mainly because it was planned as a multipurpose project, and it was its importance in meeting the Medellín area's drinking water needs that was decisive. The remaining projects in the sector's expansion plans (since as early as 1977) are still awaiting decisions on the starting dates for the construction of their main works.

   As regards financial issues, between 1986 and 1987 the National Government's lack of confidence in ISA's role in this aspect of its activities reached a crisis point, and consequently the Administration at that time (1986-90) made FEN responsible for the preparation of financial projections and their monitoring under the adjustment plan, and it was in light of these activities that Agreement 2889-CO was entered into by the Bank and the Republic of Colombia.

5. Para. 5.07 [now 5.9]: The Report also raises the issue of FEN's role in previous years with regard to loan appraisal. Until the end of 1990, FEN provided only capital investment loans. In general, the purpose of these loans -- including those made under 2401-CO -- was to supplement the sources of financing for projects already under

construction, many of which had already been studied by the World Bank or IDB. Consequently, it was considered that there was no need for further appraisal, because one or other of the Banks had already carried out prefeasibility, feasibility and design studies on these projects and issued appraisal reports. Nevertheless, in 1987 FEN began to establish appraisal groups to deal with new projects, using the methodology developed for IDB Loan 237/IC-CO. Internally, the loan allocation process involves the technical, economic, financial and institutional analysis both of the projects themselves and of the enterprises submitting applications. The appraisal document is examined by the Internal Credit Committee. This presents recommendations to the Office of the President of FEN, which in turn submits its proposals to the Board.

6. Paras. 5.08 and 5.09 [now para 5.10 and 5.11] The projection models used by FEN and the power sector are based on those used by IDB (SPMOD), as revised and upgraded by FEN with IDB approval. These models replaced the FAST used by ISA and the World Bank, with the latter's approval.

   Consequently, any criticisms in this regard should be discussed with the multilateral banks in question.

   As regards management of information, this is of course particularly difficult when so many agencies are involved in providing the basic parameters necessary for preparing projections (e.g. the macroeconomic scenario, pricing, the energy balance, investment, etc.), particularly in light of the considerable institutional complexity characterizing the power sector. As a result, models have to be used that can properly represent these parameters and that have a sufficient degree of detail to be able to produce projections that closely reflect likely developments in the sector. Naturally, it is also useful to have simpler models (and these have already been developed), but they should only be used for sensitivity analyses, once orders of magnitude for the projections have been calculated using the more detailed models.

7. Para. 5.18 [now para 5.20] As regards mobilization of funds in local currency, the Report states that, in its initial years, FEN was unable to carry out a massive transfer of resources. It explains (quite accurately) that the main cause was both the small size of the Colombian financial sector and also the lack of confidence shown by banks and corporations toward the power enterprises. Nevertheless, no reference is made to the fact that the level of funds that could be mobilized and the financial conditions applied to them were governed by the severe restrictions imposed by the monetary authorities, particularly as regards volume. The result was that the original targets were not met. The position changed dramatically in the final year, since, in November 1990, the Monetary Board (Junta Monetaria) removed the restrictions on the volume and interest rates for FEN's borrowings. At that time, FEN securities circulating on the local market totaled Col$54.5 billion. By December 1990, the figure had risen to Col$66 billion, and over the past year has progressed as follows:

FEN SECURITIES IN CIRCULATION: 1991

BY END OF MONTH	MILLIONS OF COL$
March	128,818.0
June	222,472.8
September	297,928.2
December	356,893.7

Over a single year the funds mobilized have increased more than sixfold, as a result of the measures for reorganizing FEN and, naturally, two other points of which the Report makes mention: the agency's excellent image among investors, and the mobilization mechanisms developed since it was established. These resources have provided loans for the enterprises, mainly to be used for servicing government-guaranteed debts.

8. Paras. 5.39 and 5.40 [now 5.56 and 5.57]: As has also been mentioned, the reorganization of FEN has been a gradual process, based on the legal reforms of 1990 and 1991. The first of these was Law 25 of 1990, together with the corresponding Regulatory Decree (1806/90), by which the agency became Financiera Energética Nacional S.A., with a broader sphere of activities both as regards the enterprises that could apply for loans and the categories of projects eligible for financing. In addition, the system of guarantees was changed.

Another reform (also approved in 1990) allowed FEN to make direct loans in local currency, with rediscounting one (but not the only) option for the placement of local credit. The 1991 financial reform increased the potential scope of FEN's activities by classifying it as a "financial corporation," thus allowing it greater flexibility in its activities vis-à-vis the power sector. (A more detailed account of these points can be found in the documentation concerning the negative pledge clause, prepared by FEN and forwarded to the World Bank.)

All these changes, introduced over several years, have made it possible for FEN to function properly as a development bank, controlling the enterprises' financial management. As such, its role has been confirmed by the present Administration, which drew up a reform plan for the sector in a document approved by CONPES on May 21 this year (*Estrategia para la Reestructuración del Sector Eléctrico*). This defines the functions of the various institutions and, in particular, gives FEN responsibility for entering into performance contracts that set management targets for the main enterprises in the sector.

9. The Report also states that FEN has become a window for quasi-fiscal support for the power sector, through the capitalization of the institution. This is not correct, because FEN's capitalizations were originally the result of transfers of resources from Fondo de

Desarrollo Eléctrico, and later came almost exclusively from FEN's own earnings. The agency has managed its resources and issued loans as a financial institution under the supervision of the Superintendency of Banks, while seeking to maintain the solvency and stability of the enterprise in question as part of the adjustment process in the power sector and maintaining proper stewardship of the resources invested in FEN by local savers, the international financial institutions and the Government itself.

The Bank's comment appears to refer to the mechanism operated by FODEX (the Foreign Currencies Fund), financed through accounts established by both the National Government and Banco de la República. This is used to meet the external obligations of a number of organizations, mainly in the power sector. Recently (about one year ago), FEN established a line of credit to provide loans for enterprises to enable them to service their external debts in a timely manner. However, these loans are also granted through FEN's credit facilities, in compliance with the principles laid down in its Credit Regulations. Consequently, failure on the part of the enterprises to meet their obligations toward FEN would result in the suspension of disbursements and a possible speeding up of the loan process.

I hope that you will find these comments useful in preparing the final version of the Report. We would be very pleased to discuss them with you if you consider this necessary.

Sincerely,

/s/ César González Muñoz
President, Financiera Energética Nacional S.A

PROJECT COMPLETION REPORT

COLOMBIA
POWER DEVELOPMENT FINANCE PROJECT
(LOAN 2401-CO)

PART III. SUPPLEMENTAL INFORMATION

TABLE 1. RELATED BANK LOANS

Number and Title	Amount (in US$ mill-ion)	Year of Apro-val	Borrower	Dis-bursement as of 4/30/92	Purpose
1. 38-CO: Achicaya Hydro-electric	3.53	1950	CVC/CHIDRAL	100%	Anchicaya units 1 and 2 (2 x 12 MW hydro)
2. 39-CO: La Insula Hydro-electric	2.6	1950	CHEC	100%	The Insula units 1 and 2 (2 x 10 MW hydro)
3. 54-CO: Labrija Hydro-electric	2.4	1951	LABRIJA	100%	Palmas units 1 and 2 (2 x 4.4 MW hydro)
4. 113-CO: Anchicaya Yumbo Power	4.5	1955	CHIDRAL	100%	Anchicaya unit 3 (20 MW hydro) and Yumbo unit 1 (10 MW thermal)
5. 215-CO: Yumbo Extension	2.8	1958	CHIDRAL	100%	Yumbo unit 2 (10 MW thermal)
6. 217-CO: La Esmelalda	4.6	1959	CHEC	100%	La Esmeralda units 1 and 2 (2 x 13.3 MW hydro)
7. 225-CO: Guadalupe	12	1959	EPM	100%	Guadalupe units 1 and 2 (2 x 45 MW hydro) and Troneras unit 1 (18 MW hydro)
8. 246-CO: Bogota Power	17.6	1960	EEEB	100%	Laguneta unit 4 (18 MW hydro) and Zipaquira unit 1 (33 MW thermal)
9. 255-CO: Yumbo III Calima I Power	25	1960	CVC/CHIDRAL	100%	Yumbo unit 3 (33 MW thermal) and Calima units 1 and 2 (2 x 30 MW hydro)
10. 282-CO: Second Guadalupe	22	1961	EPM	100%	Troneras unit 2 (18 MW hydro) and Guadalupe units 3, 4 and 5 (3 x 45 MW hydro)
11. 313-CO: Second Expansion	50	1962	EEEB	100%	Zipaquira unit 2 (37.5 MW hydro) and Colegio units 1, 2 and 3 (3 x 50 MW hydro)
12. 339-CO: Power Expansion	8.8	1963	CVC/CHIDRAL	100%	Calima units 3 and 4 (2 x 30 MW hydro)
13. 347-CO: Cospique Power	5	1963	ELECTRIBOL	100%	Cospique units 2 and 3 (2 x 12.5 MW thermal)
14. 369-CO: Nare	45	1964	EPM	100%	Guatape units 1, 2, 3 and 4 (4 x 70 MW hydro)
15. 537-CO: Third Expansion	18	1968	EEEB	100%	El Colegio units 4, 5 and 6 (3 x 5) MW hydro and Canoes (1 x 50 MW hydro)

TABLE 1: Related Bank Loans (Continuation)

Number and Title	Amount (in US$ mill-ion)	Year of Apro-val	Borrower	Dis-bursement as of 4/30/92	Purpose
16. 575-CO: Power Interconnection	18	1968	ISA	100%	Central System Interconnection (230 kV trans-mission line and Substation)
17. 681-CO: Chivor Hydroelectric	52.3	1970	ISA	100%	Chivor I (4 x 125 hydro)
18. 874-CO: Guatape II Hydroelectric	56	1973	EPM	100%	Guatape II units 1, 2, 3 and 4 (4 x 70 MW hydro)
19. 1582-CO: San Carlos I Hydro Power	126	1978	ISA	100%	San Carlos I (4 x 155 MW hydro)
20. 1583-CO: 500kV Interconnection	50	1978	GOVERNMENT	100%	500 kV Interconnection Central System/ Atlantic System
21. 1628-CO: Mesitas Hydroelectric Powe	84	1978	EEEB	100%	El Paraiso 3 x 90 MW; La Guaca 3 x 100 MW pumping 3 x 10 MHP; Sesquile dam strengthening
22. 1725-CO: San Carlos II Hydro Power	72	1979	ISA	100%	San Carlos II (4 x 155 MW hydro)
23. 1807-CO: Bogota Power Distribution	87	1980	EEEB	100%	Bogota distribution
24. 1868-CO: Guadalupe IV Hydro Power	125	1980	EPM	100%	Guadalupe IV (3 x 71 MW hydro)
25. 1953-CO: Playas Hydro Power	85	1981	EPM	100%	Playas (3 x 67 MW hydro)
26. 1999-CO: Village Electrification	36	1982	CORELCA	100%	Atlantic coast village electrification
27. 2008-CO: Guavio Hydro Power	359	1982	EEEB	100%	Guavio (5 x 200 MW hydro)
28. 2401-CO: Power Development Finance	170	1984	FEN	100%	Power development finance
	28.2	1984	FEN	100%	Power development finance (Cofinancing)
29. 2449-CO: Rio Grande Multipurpose	164.5	1984	EPM	70%	Rio Grande Hydro (3 x 100 MW hydro)
30. 2634-CO: Bogota Distribution II	171	1986	EEEB	70%	Bogota Distribution II
31. 2889-CO: Power Sector	300	1988	GOVERNMENT	100%	Power Sector Adjustment

Table 2: PROJECT TIMETABLE

Item	Date Planned	Date Revised	Date Actual
Identification	-	-	June 1, 1982
Preparation [a]	-	-	January 12, 1983 [b]
Post-Appraisal Mission [c]	-	-	March 7, 1983
Loan/Credit Negotiations	-	-	February 10, 1984
Board Approval	-	-	March 29, 1984
Loan/Credit Signature	-	-	June 27, 1984
Loan/Credit Effectiveness	May 1984	-	September 27, 1984
Loan/Credit Closing	December 31, 1986	December 31, 1987	December 31, 1987
Loan/Credit Completion	-	-	April 30, 1987

a\ Time taken to prepare project was 11 months.

b\ Date of combined Issues/Decisions paper.

c\ There was no formal Appraisal Mission (para. 4.1).

TABLE 3.1 LOAN DISBURSEMENTS (INTO SPECIAL ACCOUNTS)

		Disbursements (US$ Millions)		
Bank Fiscal Year and Semester	Semester Ending Calendar Month/Year	Estimated Cumulative	Actual Cumulative	Actual as % of Estimated
1. Loan 2401-CO:				
1984-II	6-84	50		
1985-I	12-84	100	80.5	80.5
1985-II	6-85	140	115.7	82.6
1986-I	12-85	170	159	93.5
1986-II	6-86		159	93.5
1987-I	12-86		159	93.5
1987-II	6-87		170	100
2. Midland Bank (US$) Cofinancing Group (Including Bank loan B-6)				
		— (US$ Millions) —		
	12-84	175	175	100
3. Industrial Bank of Japan (Yen) Cofinancing Group (including Bank loan B-7)				
		— (Japanese Yen Million) —		
	12-84	5.500	—	—
	6-85		5.500	100

TABLE 3.2. SUBLOAN DISBURSEMENTS
(US$ Millions)

	During Quarter			Cumulative Totals		
Quarter Ending	Total Loans	of which "A" Loan	"B" Loan	Total Loans	of which "A" Loan	"B" Loans
12-31-84	127.7	55.0	72.7	127.7	55.0	72.7
03-31-85	47.0	16.1	30.9	174.7	71.1	103.6
06-30-85	21.9	11.7	10.2	196.6	82.8	113.8
09-30-85	22.2	18.7	3.5	218.8	101.5	117.3
12-31-85	51.4	9.3	42.1	270.2	110.8	159.4
03-31-86	23.3	13.3	10.0	293.5	124.1	169.4
06-30-86	25.5	17.8	7.7	319.0	141.9	177.1
09-30-86	14.3	11.0	3.2	333.3	152.9	180.3
12-31-86	0.7	0.7		334.0	153.6	180.3
03-31-87	22.1	11.2	10.9	356.1	164.9	191.2
06-30-87						
09-30-87	2.1	0.2	1.9	358.3	165.1	193.2
12-31-87	11.8	5.0	6.8	370.1	170.1	200.0
03-31-88				370.1	170.1	200.0
06-30-88	0.3		0.3	370.4	170.1	200.3
09-30-88	0.5		0.5	370.8	170.1	200.7

Table 4.1 FEN's LOCAL CURRENCY BORROWINGS AS ESTIMATED AT APPRAISAL COMPARED WITH ACTUAL AMOUNTS (Col.$ Millions)

Year End	Appraisal Estimate	Actuals	
		Amount	As % of Estimate
1983	8,500	6,199	72.9
1984	18,500	7,789	42.1
1985	30,300	12,360	40.8
1986	45,000	12,636	28.1
1987	62,900	15,547	24.7
1988		29,296	46.6[1/]
1989		49,335	78.4[1/]
1990		65,729	104.5[1/]

Source:

Appraisal estimates are from SAR No. 4771-CO, Annex 2.12. Actual amounts for 1983-1989 are from FEN's 1989 Annual Report (English version), page 54, and for 1990 from audited financial statements.

1/ Percentages shown for 1988-1990 are related to estimated year-end amount for 1987.

TABLE 4.2 FEN's LOANS TO POWER COMPANIES FROM DOMESTIC FUNDS AS ESTIMATED AT APPRAISAL COMPARED WITH ACTUAL AMOUNTS (Col.$ Millions)

Year End	Appraisal Estimate	Actuals	
		Amount	As % of Estimate
1983	19,628	15,024	76.5
1984	30,686	22,571	73.6
1985	44,498	26,195	58.9
1986	61,462	34,170	55.6
1987	82,368	39,445	47.9
1988		40,826	49.6 1/
1989		45,668	55.4 1/
1990		83,111	100.9 1/

Source:

Appraisal estimates are from SAR No. 4771-CO. Annex 2.12, using total loans to power companies less external obligations and less estimates of official funds which did not actually materialize. Actuals are from audited financial statements.

1/ Percentages shown for 1988-1990 are related to estimated year end for 1987.

TABLE 5.1. FEN's RETURN ON EQUITY COMPARED TO INFLATION,
AS ESTIMATED AT APPRAISAL AND ACTUALLY ACHIEVED
(Col$ millions and %)

	Appraisal Estimates[1/]				Actuals[2/]			
Year	Average Equity	Profits	Rate of Return	Inflation	Average Equity	Profits	Rate of Return	Inflation
1983	11,294	1,788	15.8	23.0	11,892	3,003	25.3	19.7
1984	14,014	3,150	22.5	22.0	15,505	3,690	23.8	16.1
1985	17,677	4,176	23.6	20.0	19,596	4,496	22.9	24.1
1986	21,614	4,837	22.3	18.0	23,704	3,795	16.0	18.9
1987	27,599	5,993	21.7	18.0	27,789	4,434	16.0	23.3
1988					32,715	5,454	16.7	28.1
1989					38,642	6,402	16.6	25.8
1990					47,518	11,351	23.9	29.1

1/ Appraisal estimates are from SAR No. 4771-CO. Average equity is an average of beginning and end of year net worth amounts as estimated in Annex 2.12 . Profits are the yearly net income amounts as estimated in Annex 2.14. The rate of return is a calculated percentage of profits to average equity. The inflation percentages are the expected local inflation rates as shown in Annex 5.40 of SAR.

2/ Actual average equity amounts are an average of beginning and end of year shareholders' equity as reported: for end 1982 in Annex 2.12 of SAR Report No. 4771-CO; for 1983-1989 at page 52 of FEN's 1989 Annual Report (English version); and for 1990 in the independent auditors' report for that year. The additional Col$ 19,760 million of equity capital paid in by the Government in December 1990 has been omitted from the year end 1990 amount. Had it been included, the average equity for 1990 would have been Col$ 72,953 million.

Actual profits for 1983-1989 are the amounts reported at page 53 of the aforementioned 1989 annual report, except that foreign exchange gains credited directly to shareholders' equity have also been included (see Annex I, para. 9). The profit for 1990 is the amount shown in the independent auditors' report for that year similarly adjusted. The resulting additions to profits are Col$ 992 million for 1988, Col$ 4,233 million for 1989, and Col$ 3,379 million for 1990.

The rate of return is a calculated percentage of profits to average equity. Excluding the foreign exchange gains credited directly to stockholders' equity, the rate of return would be 13.6% in 1988, 5.6% in 1989 and 13.9% in 1990.

The inflation percentages are calculated from consumer price indices (1985=100), period averages, as reported in International Financial Statistics, 1991 yearbook, published by International Monetary Fund.

TABLE 5.2: FEN - COMPARISON OF PROJECTED VS ACTUAL SUMMARY BALANCE SHEETS (in current Col$ millions) AND SELECTED PERFORMANCE INDICATORS

	Projected a/						Actual b/							
	1982	1983	1984	1985	1986	1987	1983	1984	1985	1986	1987	1988	1989	1990
Liquidity	1274	1175	3229	5348	7868	10790	5431	16972	22607	11697	9074	18421	58082	21348
Loans to Power Companies	9089	19628	60285	85804	130600	185613	15032	37064	76994	123241	169871	263536	382708	655043
Fixed & Other assets	-215	136	174	219	272	337	36	1149	2876	4862	7845	15908	21411	40064
Total Assets	10148	20939	63688	91371	138740	196740	20499	55185	102477	139800	186790	297865	462201	716455
Local Obligations	-	8500	18500	30300	45000	62900	6036	7540	11878	12272	17708	28637	48885	65729
External obligations	-	-	25230	35167	60709	91854	0	29078	66243	95149	131134	216656	337138	528669
Official Funds	-	-	4369	6139	8429	11391	826	1194	2537	6789	7959	17131	34335	49104
Total Liabilities	0	8500	48099	71606	114138	166145	6862	37812	80658	114210	156801	262424	420358	643502
Net Worth	10148	12439	15589	19765	24602	30595	13637	17373	21819	25590	29989	35441	41843	72953
Net Income 1/		1788	3150	4176	4837	5993	3003	3690	4496	3795	4434	5454	6402	11351
RATIOS														
Debt/Equity 2/		0.7	3.1	3.6	4.6	5.4	0.5	2.2	3.7	4.5	5.2	7.4	10.0	8.8
Gross Spread 3/		8.5%	4.9%	4.6%	3.5%	3.0%	14.6%	6.7%	4.4%	2.7%	2.4%	1.8%	1.4%	1.6%
Increment in Net Worth		22.6%	25.3%	26.8%	24.5%	24.4%	34.4%	27.4%	25.6%	17.3%	17.2%	18.2%	18.1%	27.1% 5/
Increment in Loans Outstanding 4/		2.2	3.1	1.4	1.5	1.4	1.7	2.5	2.1	1.6	1.4	1.6	1.5	1.7

1/ Actual net income for 1988 through 1990 has been restated as explained in the second paragraph of footnote 2/ of Table 5.1
2/ Total indebtedness over net worth
3/ Net Income as a percentage of total assets
4/ Net of repayments
5/ Based on year-end net-worth of Col$53,193 m exclusive of Col$19,760 m of equity capital paid in by the Government in December 1990

Sources:

a/ Annex 2.13 of Staff Appraisal Report No. 4771-CO.
b/ FEN - Informe de evaluacion final del emprestito FEN-BIRF 2401-CO; and FEN - 1990 Annual Report

File: TABLE-52.WK1

TABLE 6: STATUS OF COVENANTS

SECTION OF LOAN AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
2.02	Bank Disbursement to be made:		
(a)	For specified purposes under bank approved sub-loans, consultant services and the Bank's front end fee;	Met	5.1
(b)	Initially into FEN's special account at the Central Bank and thereafter to finance eligible expenditures under subloans;	Met	4.21
(c)	For free limit subloans;	Not used	5.9
(d)	For a limited amount of retroactive expenditures and to finance foreign exchange costs;	Uncertain	4.22, 4.23, 5.36
(e)	For goods and services procured under procedures set-forth in Schedule 1 of Power Financing Agreement;	Met	4.23
(f)	For the categories and amounts in Schedule 1;	Met	
2.03	Requests for subloan approval:		
(a)(b)	shall contain specified information;	Met	5.1
(c)(i)	shall be presented to the Bank on or before December 31, 1985; and	Met	Para 5.1
(ii)	shall be presented in respect of sub-loans to be made to ICEL and CORELCA only if Bank has been furnished not later than November 30, 1984 with:		
(A)	a financial plan, satisfactory to the Bank for each power company covering their respective financial program and performance during the years 1984 through 1987; and	Not met	Para 3.2
(B)	a complete financing scheme, satisfactory to the Bank, for the Urra Project (CORELCA) and la Miel Project (CORELCA),	Not Met	Para 3.2
3.01(c)	FEN to employ consultants by June 30, 1984 to carry out technical capacity strengthening program of (a) (ii) (Supplemental letter) using Bank guidelines	Consultant retained July 1985	Para 5.9
(d)(i)	By December 31, 1984, carry out study included in program of paragraph (a) (ii) under terms of reference satisfactory to the Bank;	Study completed September 1985	Para 5.9
(ii)	Upon its completion furnish report to Bank for comments;	Met	Para 5.9
(iii)	Based on recommendations of report and comments thereon employ experienced and qualified staff for FEN's technical operations	Met	Para 5.9
3.02(a)	FEN to make sub-loans to eligible Power Companies only by Subsidiary Loan Agreements satisfactory to Bank and including specified provisions for passing on the foreign exchange risk, a minimum spread and a maximum term	Met	Paras 3.7, 5.1
(b)	FEN shall not waive, amend or fail to enforce the subsidiary loan agreements, except with the Bank's agreement	Not Met	Paras 5.41-5.43
3.03(a)	FEN to furnish periodic progress reports	Met	Paras. 5.32-5.39
3.03(b)	FEN to furnish project completion report to Bank within six months of last withdrawal from the Loan Account	Report submitted November 1989	
3.04	FEN to exercise its rights in relation to the Power Financing Agreement	Uncertain	
4.01(a)	FEN to maintain procedures and records to monitor and record the progress of the Project and each subproject;	Met	
(b)	FEN to retain all records as evidence for Loan Account withdrawals	Met	

SECTION OF LOAN AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
4.02 (a)	FEN's financial statements and Special Account:		
(i)	to be audited annually by independent auditors acceptable to the Bank;	Met	
(ii)	to be submitted to the Bank by March 31 of each year;	Met	
(iii)	To include an audit of the statements of expenditures	Not met	Para. 5.34
(b)	FEN to prepare for the Bank a report of such scope and detail as the Bank reasonably requests showing:	Not met	The Bank did not request that such information be included in the quarterly reports submitted under 3.03 (a)
(i)	Quarterly, no later than 60 days after the quarter reported, its performance during the 12 month period preceding the end of the quarter and projected for the following 12 month period;		
(ii)	Annually no later than 60 days after the end of each fiscal year, up-to-date projections of FEN's balance sheets, statements of income and statements of sources and application of funds for the following seven-year period.	Only one such submission was made, for the year 1986-1995	Para 5.29
4.04(i)	FEN to maintain debt/equity ratio specified in Section 4.05;	Not met	Paras
(ii)	FEN to take reasonable action to bring such ratio to within this limitation promptly if the ratio is exceeded.	since 1988	5.49-5.55
4.05(a)	FEN's debt/equity ratio not to exceed 7:1 with any new borrowing;	Not met	Paras 5.49-5.55
4.06(a)	FEN, during February of each year:		
(i)	Estimate according to methodology satisfactory to Bank:		
	(A) expenditures to be incurred by FEN during following 12 months;		
	(B) local debt amortization service requirements of FEN for the same period;		
(ii)	maintain a reserve over the 12-month period, 50% convertible to cash within 90 days, balance convertible within 30 days, not less than the sum of:	Met	
	(A) 1/6 FEN's estimated expenditures for the period, plus;		
	(B) 1/12 FEN's estimated local debt amortization service requirements for the same period.		
4.08	FEN to take protective steps against risk of loss resulting from changes in rates of exchange used in lending operations.	Met	
4.09	Bank and FEN, at the request of either party, to exchange views from time to time with regard to administration, operations and financial conditions of FEN and FEN to furnish all information Bank may reasonably request concerning FEN's administration, operations and financial conditions.	Met	
4.10	FEN to enable Bank representatives to inspect records referred to in Section 4.01 (a) and any relevant documents;	Met	
4.11	FEN to furnish Guarantor and Bank by December 31, 1984 an acceptable plan of action to enable FEN to raise sources in the Colombian capital market on a long and medium term basis;	Not Met	Paras. 5.13-5.16
4.12(a)	FEN to take actions to raise in Colombia not less than Col$10,000 million during 1984, 11,800 million during 1985, 14,700 million during 1986 and 17,900 million during 1987;	Not Met	Paras 5.16-5.18
4.12(b)	FEN, Guarantor and Bank shall exchange views not later than April 1 of each year on FEN's performance of its borrowings and lending operations during the preceding 12-month period and its projected borrowing and lending operations during the immediately succeeding 12-month period.	Met	Para 5.17

SECTION OF LOAN AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
4.13(a)	Carry out (i) study on the finances of the power sector by September 15, 1984 to include formulation and evaluation of alternative proposed strategies for financing the power sector; and (ii) promptly thereafter exchange views with Bank and Guarantor on the Study.	Not Met	Paras 5.10-5.12
(b)	FEN, Guarantor, ISA and Bank to exchange views by August 31 of each year on the adequacy of the financing strategy for the power sector.	Not Met	Paras 5.10 - 5.12
4.14	FEN not to enter into new lending commitments with any power company or other bank borrower which shall have failed to make payments to FEN at the time payable, until such payments are made.	Met	
	Default provisions:		
5.01(a)	Any loan to FEN having an original maturity of 1 or more years has become due and payable in advance of maturity, or security shall have become enforceable;	Not applied	None of these contingencies eventuated except (d), and in that case the Bank chose not to take action.
(b)	a change made in FEN's credit regulations or relevant legislation which would adversely affect FEN's financial condition or operations or execution of the project;		
(c)	a resolution for the dissolution or liquidation of FEN		
(d)	failure of FEN or any of the power companies to comply with obligations under the Power Financing Agreement or the Subsidiary Loan Agreement;		
(e)	FEN's access to BR discounting facilities terminated or limited or amended in such way that terms provided to FEN are less favorable than given to similar financial intermediates operating in Colombia.		

POWER FINANCING AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
2.02	ICB required for procurement of goods and civil works under the sub-projects financed by FEN out of the loan proceeds.	Met	
3.03	Power companies to take out and maintain with responsible insurers, insurance against such risks and in such amounts as is consistent with appropriate practice.	Met	
	Financial information for power companies:		
4.02	Each of the Power Companies shall:		
(a)	Have its accounts and financial statements audited by independent auditors acceptable to the Bank;	Met	
(b)	Provide FEN not later than 4 months after end of each year certified copies of the financial statements for such year;	Met	
(c)	Provide FEN not later than 6 months after end of each year up-to-date projections of the financial statements for the following seven year period;	Not Met	
(d)	provide FEN with other financial information as FEN shall reasonably request to enable FEN to maintain an updated financial assessments of the power company.	Not Met	
4.03	Capital expenditure limitation. A power company is not to commit itself to new capital expenditures other than ongoing-works until sub-projects are complete unless:		
(a)	proposed new project is economically justified; and		
(b)	annual expenditures, including new project, shall not exceed 1% of current net value of its fixed assets for the corresponding year, or if it does, it has obtained financing under conditions which will not adversely affect its financial conditions and performance of its obligations to FEN. (Supplemental letter gives list of on-going projects excluded from this condition)	Met	

POWER FINANCING AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
4.04(a)	EPM, CVC (Including CHIDRAL), EEEB, CORELCA, and ISA to maintain tariffs ensuring rates of return as follows: in 1984 / in 1985 and thereafter EPM 7% 10% CVC 9% 9% EEEB 14% 14% CORELCA 11% 11% ISA 9% 9%	Not Met	
(b)	the power companies of (a) to review in the first two months of each quarter of the fiscal year, the adequacy of their tariffs and furnish to the Bank and FEN the results of such review:	Not Met	Met only by EPM and ISA
(c)	should a power company not expect to earn the agreed rate of return for the next 12-month period, including the quarter of the report, it should adjust its tariffs accordingly to be in effect no later than the end of the following quarter.	Not Met	
4.05	EEEB to take steps (including adjusting its tariffs and charges for the supply and sale of electricity) as required to insure that funds from internal sources generated by EEEB shall be equivalent to not less than following percentages of EEEB's investments in fixed assets and ISA for each year 1984: 35% 1985: 55% 1986: 55% 1987: 55%	Not Met	
4.06	Except as FEN otherwise agrees, each Power Company shall not incur any long term debt unless a reasonable forecast slows that for each year during the term of the debt, the debt service coverage test indicator (internal cash generation/debt service requirement) would be not less than:	Uncertain	EPM complied. ISA requested and received exemptions from the requirement
(i)	CORELCA 1.3		
(ii)	ISA, EPM, EEEB, CVC 1.5		
(iii)	ICEL 1.2 (from 1/88)		
4.07	Each power company, as a shareholders of FEN, to take all action necessary to ensure FEN does not pay any cash dividend or repurchase its shares of stock for cash.	Met	
5.01(a)	ISA to cooperate with FEN to enable FEN to fulfill its obligations under Section 4.13 of the Loan Agreement.	Met	
(b)	ISA to exchange views with the Guarantor, the Bank and FEN on an annual basis pursuant to provisions of paragraph (b) of section 4.13 of the Loan Agreement.	Not Met	Paras 5.10-5.12
5.02	ISA to cooperate with Guarantor to prepare price index for the Electricity Sector pursuant to Section 3.06 of the Guarantee Agreement.	Not Met	On 29 May 1985, ISA sent the Government a proposal for computing such an index, but the Government took no action on this proposal. Also see para. 5.27
5.03	ISA to prepare not later than April 30 in each year a study on up-dated electricity demand growth projections and sector investment programs for purposes of the review of Section 3.13 of the Guarantee Agreement	Met	Paras 5.10-5.12
5.04	ISA and ICEL and ISA and CORELCA, jointly with Guarantor, to prepare scheme referred to in sub-paragraph (c) (ii) (B) of Section 2.03 of Loan Agreement and take all actions necessary to enable Guarantor to fulfill its obligations under paragraph (a) section 3.11 of Guarantee Agreement	Met	Para 3.2
6.01	FEN may suspend disbursement of sub-loans if (a) a power company defaults in payments to FEN under sub-loans or other loan agreement between FEN and the power company; or (b) a power company defaults in the performance of any other obligation by a power company under the Power Financing Agreement or subsidiary Loan Agreement or any other Loan Agreement between FEN and the respective power company; or (c) FEN's right to make withdrawals under the project loans is suspended.	Not applied	Para 5.27. Although there were instances under (a) and (b) when FEN could have acted it chose not to. The condition in (c) never arose.

GUARANTEE AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
3.02	Guarantor to authorize new projects by the power companies only if such projects are economically justified and the respective power company has adequate financing for such purposes and the carrying on of its operations	Not Met	Urra I project was originally authorized without this condition being fully met, but implementation of the project did not proceed in full. Reportedly, more recent analysis indicates that the project now meets all the required criteria, except for a complete financing plan which is expected to be closed in the near term.
3.03(a)	Guarantor to take all actions to enable FEN to prepare plan of action to raise resources in the Colombian capital market referred to in Section 4.11 of the Loan Agreement; and	Not Met	FEN did not prepare such a plan. See paras 5.13-5.16
(b)	promptly put plan into effect		
3.04	Guarantor to take or cause to be taken all actions necessary to enable FEN to meet its borrowing targets in the Colombian capital market set forth in paragraph (a) of Section 4.12 of the Loan Agreement.	Met	FEN did not meet targets but this was not due to lack of Government support related to access to the capital market
3.05(a)	not later than April 1 of each year, Guarantor to exchange views with the Bank and FEN for the purpose of paragraph (b) of Section 4.12 of the Loan Agreement;	Met	Para 5.17
(b)	Not later than August 31 of each year, Guarantor to exchange views with the Bank, FEN and ISA for the purpose of Section 4.13 (b) of the Loan Agreement.	Not met	Paras 5.10-5.12
3.06(a)	Guarantor to furnish to Bank not later than December 31, 1984 for review and comments, proposal for the computation of price index of variation of prices of electric sector goods and services;	Not Met	Para 5.27
(b)	starting January 1, 1985, compute and publish the variations in the price index.	Not Met	Para 5.27
3.07	Guarantor to take all actions to enable the power companies to set and maintain electricity tariffs and charges at levels sufficient to fulfill each of their obligations pursuant to Section 4.04 of the Power Financing Agreement.	Not Met	Paras 5.16, 5.20,5.27
3.08	Guarantor undertakes to take all actions to ensure the timely procurement of the goods and services required for each project.	Met	
3.09	Guarantor to take all actions on its part, including the provisions of funds, to enable Power Companies to perform their respective obligations (including financial) under the Power Financing Agreement.	Not Met	
3.10	No taxes to be levied on Power Financing Agreement.	Met	
3.11(a)	Prepare and furnish to Bank no later than November 30, 1984, the plans and schemes referred to in sub-paragraph (c) (ii) of Section 2.03 of the Loan Agreement.	Met	Para 3.2
(b)	take, and cause ICEL and CORELCA to take, all actions necessary, including timely provision of budgetary resources, to enable such power companies to carry out the plans and scheme referred to.	Not applicable	Para 3.2
(c)	take all actions necessary, including timely provision of funds, to enable ICEL and CORELCA to make payments required to service the sub-loans and FEN loans made to them by FEN under the project;	Met	Applicable only to CORELCA

GUARANTEE AGREEMENT	DESCRIPTION	STATUS OF COMPLIANCE	PART I REFERENCE OR REMARKS
3.12	Guarantor to cause ICEL:	Not applicable	It was agreed that since ICEL was not declared eligible for loans under the project, these provisions would not be applied
(a)	to carry out an administrative reorganization plan based on recommendation of study carried out by ICEL's Division de Asesoria Control Administrativo not later than December 31, 1984;		
(b)	to prepare no later than August 31, 1984, a preliminary estimate of ICEL's fixed assets in operation works in progress, and thereafter, to revalue the current value of the assets in accordance with paragraphs 5, 6 and 7 of schedule 2 to the Power Financing Agreement		
(c)	to (i) carry out, not later than December 31, 1984, a study to determine valuation of ICEL's fixed assets in operation and works in progress in accordance with terms of reference satisfactory to the Bank; and (ii) employ consultants satisfactory to the Bank to carry out the study referred to in (i).		
3.13	Guarantor to provide Bank by september 30 of each year, for its comments, the updated electricity demand growth projections and the related power investment program on the basis of the study prepared therefore on an annual basis by ISA.	Not Met	
3.14	Guarantor, as shareholder of FEN, shall take actions necessary to ensure than FEN does not declare or pay any cash dividend on its shares, or repurchase any of its shares of stock for cash.	Met	

Table 7: USE OF BANK RESOURCES

A. STAFF INPUT (2401-CO)
(Staff Weeks)

Bank FY	1983	1984	1985	1986	1987	1988	1989	Total
Through Appraisal	20.9	16.2						37.1
Negotiations		27.6						27.6
Supervision		2.4	6.3	11.9	6.7	4.6	1.5	33.4
Total	20.9	46.2	6.3	11.9	6.7	4.6	1.5	98.1

B. MISSION DATA (LOAN 2401-CO)

Type of Mission	Month / Year	No. of Weeks	Staff Weeks in Field	No. of Persons [c]	Performance Rating [a]	Type of Problems [b]
Preparation I	6/82	[d]				
Preparation II	11/82	[d]				
Preparation III [e]	5/83	1	3	3(LO,E,LA)		
Preparation IV [e]	6/83	2	3	3(LO,E,LA)		
Post-Appraisal I	3/83	3	16.6	8(LO,2PE, 2FA,2CO,LA)		
Post-Appraisal II	4/83	1	1	1 FA		
Post-Appraisal III	10/83	2	2	1 FA		
Supervision I	9/84	1.5	1	1 PE	1	
Supervision II	3/85	1.5	0.5	1 PE	1	
Supervision III	10/85	1.5	3	2 (PE, FA)	1	
Supervision IV	8/86	3	3	1 CO	1	M
TOTAL		16.5	33.1			

a\ 1 = Problem-free or minor problems; 2 = Moderate problems; and 3 = Major Problems

b\ F = Financial; T = Technical; M = Management

c\ PE = Power Engineer; FA = Financial Analyst; E = Economist; LO = Loan Officer; CO = Consultant; LA = Lawyer

d\ No information available in the Project File.

e\ Mission to promote participation of Cofinceirs in B-Loan.

PROJECT COMPLETION REPORT

COLOMBIA
POWER DEVELOPMENT FINANCE PROJECT
LOAN (2401-CO)

UNILATERAL SIX MONTH EXTENSION OF SUBLOAN AMORTIZATION PERIOD

1. By letter dated July 19, 1988, FEN informed the Bank that at a meeting on July 14, 1988, its Board of Directors had adopted a resolution which extended the subloan amortization period by six months. Under the resolution, effective August 1, 1988, the six month extension was applicable to amortization payments due between that date and January 31, 1989, and to all successive payments previously scheduled on subloans made from the proceeds of the "A" and "B" loans, as well as certain subloans from local resources. This action was taken without prior consultation with or consent by the Bank. Section 3.02 (b) of the Loan Agreement, however, provides that, except as the Bank shall otherwise agree, FEN shall not amend, or fail to enforce any provision of, the subsidiary loan agreements entered into for relending the "A" and "B" loans. In order to determine whether to approve the action taken, the Bank requested FEN to provide it with financial projections for the next two years so that it could see how FEN's finances were affected. The Bank also asked FEN, when similar cases arise in the future, to provide it with an opportunity to comment before decisions are taken, as required by the loan documents (letter dated August 16, 1988).

2. The information provided by FEN in response to the Bank's request is available in the project files in the form of detailed financial projections for the period 1988-1990, dated September 12, 1988. An internal staff memorandum dated November 28, 1988, refers to, but does not include, actual and forecast financial statements for the period 1984-90 prepared from the information received from FEN and available in the files. The memorandum states that these show that the extension of the subloan amortization period will not have any material effect on FEN's finances and that FEN would continue to have adequate financial ratios. On this basis, it recommends that a letter be sent expressing no objection to the modification of the subsidiary loan agreements. The letter was sent on December 2, 1988. It refers to FEN's letter of September 13 and telefax of November 11 supplying information requested by the Bank (both of which are missing from the files); it emphasizes that the procedure utilized by FEN to modify the subsidiary loan agreements without prior agreement of the Bank was not in accordance with Section 3.02 (b) of the Loan Agreement; it states that as an exception in this instance the Bank has decided to approve the six month extension of the amortization period of the subloans to the power companies; and it concludes by requesting the personal intervention of FEN's President, to whom the letter was addressed, to ensure strict compliance in the future with the provisions of the loan documents.

3. The only specific information in the aforementioned memorandum is a listing by company of the amounts of the amortization payments postponed for six months,

totalling US$18.9 million for the subloans made using the proceeds of the "A" and "B" loans and US$11.9 million for subloans made from funds raised locally. These are significant amounts and one would have expected some discussion, beyond the conclusory judgments stated, of the effect of these postponements on FEN's finances. The memorandum was prepared by an assistant level analyst. The file copy of the letter of December 2, 1988, notes that it was cleared in substance by a senior financial analyst, but this matter may have received only cursory attention by him. Considering the record as it now exists with some of the supporting material for the Bank's conclusions missing from the files, one is left with the impression that the Bank's financial analysis was superficial, and that the Bank, having been presented with a fait accompli, decided it had no choice but to accede to the extension with the admonition that FEN seek the Bank's prior approval for any future modifications of the subsidiary loan agreements. Nevertheless, as demonstrated in the next section relevant to FEN's profitability, the conclusion that the extension had no material impact on FEN's finances was appropriate even though the further claim that FEN's financial ratios would continue to be adequate was not.

Impact of Extension on FEN's Profitability.

4. It is uncertain what financial ratios were calculated in the analysis which led to the conclusion in the aforementioned memorandum that they would continue to be adequate. It is implicit, however, that a very significant ratio was omitted, namely the rate of return earned on FEN's equity. As shown in Part III, Table 5.1, FEN's real return on average equity was significantly positive in 1983 and 1984. It became marginally negative in 1985 and substantially so in 1986 and 1987, when the nominal return on equity for each of these years was 16% in comparison to rates of inflation of 19% and 23%, respectively. These historic negative returns should not have been characterized as adequate.

5. The projections supplied by FEN explicitly called attention to the expectation that the rate of return on equity for 1988 would be negative by about 10 percentage points. As shown in Table 5.1, the actual nominal return on equity for 1988 was 16.7% compared to an inflation rate of 28.1%. FEN's projections that its return on equity for 1989 and 1990 would match the rate of inflation did not prove to be accurate. The actual return on equity in 1989 was 16.6% compared to an inflation rate of 25.8%, and in 1990 the actual return was 23.9% compared to an inflation rate of 29.1%. As analyzed below, although FEN subsequently concluded that the extension contributed to a decline in its profitability in 1988 and 1989, this is based on an incomplete statement of its net profits (see para 9). In any case, as a result of its evaluation of the justification presented for the extension, the Bank should have become aware that FEN's rate of return on equity in recent years had been substantially less than the rate of inflation and inquired into the reasons for this unsatisfactory relationship and the remedies that might be proposed for correcting it.

6. With respect to the subloans made from the proceeds of the "A" and "B" loans, the postponed amortization payments were the initial repayments due thereunder at the end of the four year grace period originally provided. Of the total amount of repayments to FEN which otherwise would have been payable,

US$17.1 million was due between October 31 and December 18, 1988, and US$1.8 million on January 15, 1989. Since the four year grace period under the "A" and "B" loans also ended in 1988, FEN had already begun, on June 27, 1988, to repay these loans. To make up for the funds foregone as a result of its decision to extend the subloan amortization period, FEN had to increase its borrowings from the domestic capital market. According to FEN's Annual Report for 1989, the costs of this increase in peso borrowings were not totally recovered and this had an adverse impact on its finances in 1988 which extended into 1989 (English Version, Section headed "Financial Management", pages 11 and 14). In the analysis which follows, it is assumed that the extension of amortization of subloans from locally raised funds had no adverse impact because the interest rates charged on such subloans include an appropriate margin over the cost of raising local funds.

7. There are two sources of income to FEN resulting from the extension of the amortization period of the subloans made from the proceeds of the "A" and "B" loans: interest income and increases in the peso values of these foreign currency denominated subloans due to exchange rate adjustments. The latter is the more significant of the two sources. FEN's interest income on the amount of the subloans from external sources remaining outstanding due to the postponed amortization is based on foreign determined interest rates (of about 9-10% in 1988-90) applied to the US$ equivalent value of the subloans and translated into pesos at the exchange rate applicable at the time of payment. That income initially would be substantially less than the interest costs incurred at much higher rates (of about 30-40% in 1988-90) on the peso amount of borrowings from the domestic capital market equivalent in value to the postponed amortization payments based on the exchange rates applicable when they were originally due. The peso amount of these borrowings would remain fixed and rolled over as long as necessary throughout the nine year period for repaying the subloans. The subloans, however, are repayable in pesos equivalent to the foreign currencies in which the source of the subloans, namely the "A" and "B" loans, are or were repayable. As a result of the increase in the peso value of the foreign subloans reflecting the devaluation of the peso, the interest income on the extended portion of the subloans will also increase and in time equal and then surpass the interest costs on the fixed amount of peso borrowings incurred because of the extension of the amortization period. As it would have appeared in 1988, a period of about four to five years would be needed before the break even point is reached.

8. More important, the increase in the peso value of the foreign currency denominated subloans is also available to offset the initially higher interest costs on the domestic peso borrowings incurred because of the extension of the amortization period. The average annual increase in the US$ exchange rate in 1989 and 1990 was about 30%. Thus, taking both of these sources of income into account, the extension of the foreign subloans should not have caused a decline in FEN's profitability for more than a brief period; the impact of the extension on FEN's profits would become neutral within at most a year and thereafter would be positive. Parenthetically, it should be noted that the impact of the action taken by Colombian authorities effective in October 1991 to allow the exchange rate to be determined in a free market was not foreseeable in 1988. Earlier in

1991, other actions had been taken to revalue the peso. As a result, there has been a substantial real appreciation of the peso. In 1991, as measured by the official Col$/US$ rate, the nominal devaluation of the peso was 24.3%, about the same as the difference in inflation between Colombia and the USA; as measured by the parallel or free market rate, the nominal devaluation was 13%, some 10% below the Colombian-US inflation differential (The Economist Intelligence Unit, Country Report No. 1 1992, page 17). Since October 1991, FEN and the power companies have been using the parallel rate to effect transactions in foreign currency and to denominate their foreign currency obligations.

9. As reported by FEN in its annual financial statements for 1988-90, net profits include only that part of its foreign exchange gains which are credited to "direct operating income" and exclude substantial amounts of foreign exchange adjustments which are credited directly to "stockholders' equity". This distinction is not explained but it may be related to income tax consequences. As so reported, however, FEN's rate of return on equity shows declines to levels of about 13% in 1988 and 5% in 1989. This is the basis on which FEN concluded in its 1989 Annual Report, as mentioned in para 6, that the costs of the peso borrowings to make up for the funds foregone because of the extension of the subloan amortization period were not fully recovered and that this adversely affected its finances. In calculating the higher rates of return stated in para 5, all exchange gains including those credited directly to stockholders' equity are counted as part of net profits, as the more appropriate way to measure FEN's performance. On this basis, as stated in para 8, the costs of the increased peso borrowings were fully recovered and the extension of the subloan amortization period had no material adverse impact on FEN's profitability.

Broader Context for Evaluating Postponement of Subloan Amortization.

10. It is important to note that even without the extension it was necessary for FEN to raise considerable amounts through domestic borrowings in order to meet its repayment obligations under the "A" and "B" loans in 1988. The total of about US$44 million due and repaid on these loans by FEN in 1988 was over US$27 million more than the postponed repayments due to FEN on the subloans to the power companies made from the proceeds of those loans . Loan repayments by FEN continued to be higher than subloan repayments to it for the next three years. The cumulative negative balance reaches a peak at the end of 1991 of US$57 million as originally scheduled and of US$75 million as modified. This is shown in Table A hereto, which presents a comparison of FEN's repayments on the "A" and "B" loans with the repayments to FEN on the subloans as originally scheduled and as modified for the six month extension of the subloan amortization period. The US$ equivalent amounts in this table, which are used in this analysis, are based on the equivalent values of the loans and subloans as of the time they were made or drawn down and do not reflect the impact of subsequent changes in exchange rates applicable to the "A" loan because of the Bank's currency pooling system and to the Japanese yen denominated "B" loan. After a grace period of four years, the repayment period is 13 years for the "A" loan, and four years for the commercial bank share of the "B" loans plus an additional one and one half to two years for the Bank and Nordic Investment Bank shares of the "B" loans. Thus, repayments by FEN are exclusively for the "A" loan from

1995 to 2001. The repayment period on the subloans is nine years after a grace period extended from four to four and one half years.

11. From 1992 through 1997, the position reverses and FEN would receive more in repayments from the power companies than it must repay on the "A" and "B" loans. On a cumulative basis the net position becomes positive by 1995 as originally scheduled and by 1996 as modified. The maximum positive position is reached in 1997 in the amount of US$43.4 million as originally scheduled and of US$41.8 million as modified. In 1998, when the final payments to FEN on the subloans are made, the amounts FEN receives from these repayments by the power companies are once again smaller than FEN's repayment obligations. Thereafter, the remaining balance of US$32.66 million on the "A" loan is to be repaid in 5 semiannual installments, ending March 1, 2001, using the cumulative positive balance of funds received from repayment of the subloans.

12. Thus, FEN's finances have had to reflect the need to borrow local funds to compensate for its net negative position with respect to repayment obligations related to the "A"and "B" loans during 1988-1991. In subsequent years, FEN's finances will reflect the maintenance of the borrowings as long as necessary. As explained in para 8, the extra carrying costs of these borrowings should be fully offset by the interest income earned on the corresponding amount of subloans that remain outstanding plus the foreign exchange adjustments in their peso values. During 1992-1997, FEN's finances will also reflect the consequences of annual net positive positions. One consequence will be a decrease in the amount of foreign currency denominated subloans, on which FEN earns interest and benefits from increases in their peso values as a result of currency devaluations in relation to the peso. As an offset, FEN would be able to utilize the annual surpluses to repay local borrowings or for additional local loans to the power companies or other peso investments. Except as stated in the next paragraph, these offsets should be adequate to protect FEN from any material adverse effects on its profitability because it had to borrow local funds during 1988-1991 to meet higher repayment obligations on the "A" and "B" loans than the amounts repaid to it on the subloans made from those sources.

13. The situation changes when there is a cumulative surplus of funds repaid from subloans over the amounts repaid by FEN on the "A" and "B" loans. When this occurs, in 1996 under the revised amortization schedule as compared to 1995 under the original schedule, the outstanding amount of subloans will be less than the outstanding amount borrowed by FEN to finance them. From that time, FEN will bear the foreign exchange risk on the borrowings to the extent that their outstanding amount exceeds that of the subloans, and after the subloans are completely repaid in 1998, FEN will bear the entire foreign exchange risk. There can be no assurance that FEN's earnings on the peso surpluses accumulated to repay the borrowings will be adequate to offset fully the foreign exchange risk which can no longer be passed on to the power companies.

14. In this context, the six month extension of the subloan amortization period effective August 1, 1988, has a positive effect because it reduces to a small extent in time and amount FEN's unprotected exposure to foreign exchange risk. Its incremental impact, however, is of relatively minor importance. The

significant problem which should have been recognized is the much more substantial impact of the mismatch between the repayment terms of the external loans obtained under this project and of the subloans made from these sources. One question which arises is why this was not addressed during the project design stage or during the early stage of implementation when the subsidiary loan agreements were proposed for approval. Another question is whether remedial action might have been proposed for consideration had the mismatching problem been recognized when the request for approval of the six month extension of the subloan amortization period was made in 1988.

Alternatives to Reduce Mismatching which Deserved Consideration: (i) at Appraisal.

15. One step, permissible under Bank policy, which could have been considered during the project design stage to minimize the mismatching problem was an extension of the grace period on the "A" loan from four to five years in exchange for a reduction of the repayment period from 13 to 11 years. In attached Table B, the schedule for repayment by FEN of the "A" and "B" loans which would have been applicable if this change had been made is compared with the repayments on the subloans made to FEN by the power companies shown on two bases: as originally scheduled based on a 13 year term, including a four year grace period (Heading A), and assuming that the term had been set at 15 years, including a four year grace period (Heading B). This second basis shows the subloan repayment requirements which would have been applicable under the maximum subloan terms permitted under the Bank Loan Agreement, Section 3.02 (a). These alternatives should be compared to the repayment schedules actually agreed and adopted (Table A, Heading A) to illustrate the specific comparisons that might have been made if these choices had been analyzed during appraisal.

16. Under the first basis of comparison (Heading A of each table), the subloan repayment requirements are identical and are those actually adopted and originally scheduled. This comparison indicates that the one year extension of the grace period on the "A" loan in exchange for a two year reduction in its repayment period, when blended with the shorter repayment terms of the "B" loans which were as liberal as could be arranged, would have provided a significantly better match for the subloan repayment terms actually adopted. Both the negative and positive variances would have been substantially less. The maximum cumulative negative position would have been US$51.6 million in 1992 compared to US$57.1 million in 1991. The maximum cumulative positive position would have been US$36.3 million compared to US$43.4 million in 1997, and the period during which FEN's debt service requirements on the "A" loan would continue after complete repayment of the subloans would have been reduced by one year. As a result, FEN's need to borrow locally to make up for the negative differences, and the amount and extent of its unprotected exposure to foreign exchange risk after the cumulative position becomes positive would have been reduced.

17. The results are mixed for the second basis of comparison, which assumes both that the "A" loan would be repaid over a shorter period, a 15 year term including a five year grace period, and that the subloans would be repaid over a longer period, a 15 year term, including a four year grace period (Heading B

of Table B), instead of the terms actually agreed for both the "A" loan and the subloans (Heading A of Table A). On this basis, the negative variances would have been much more substantial. The cumulative negative peak of US$83.9 million in 1992 would have been US$26.8 million more than under the repayment terms actually adopted and the negative position would have extended over ten rather than seven years. On the other hand, the annual repayment requirements for the power companies would have been very substantially reduced and better adapted to their debt service capacity. Also, FEN's unprotected exposure to foreign exchange risk would have been minimal.

18. There is no indication in the project record that any consideration was ever given to the alternative that the Bank loan might have a 16 year term, including a five year grace period, rather than a 17 year term including a four year grace period. Apparently, this basic step in the analysis which should have been carried out during appraisal was omitted. This oversight may have occurred because the Bank personnel concerned with this project, including management, mistakenly assumed there would be no significant mismatch between FEN's repayment requirements on its borrowings for the project and the repayments it would receive from the power companies on the subloans made in relending those borrowings. This conclusion is reinforced by the categorical statements made, both in the Staff Appraisal Report (para 4.09) and the President's Report (para 60), that the onlending terms would be such that the full foreign exchange risk would be borne by the power companies. Had this matter been analyzed as it readily could and should have during appraisal, the problem would have been identified. In that event, it is likely that the Bank would have proposed a one year extension of the grace period for the "A" loan in exchange for an equivalent reduction in its term in order to mitigate the problem. Whether the Colombian authorities, in particular the Government, would have accepted such a proposal, is less certain, but given the resultant advantages noted in para 15 for reducing both the negative variances which would have to be financed and the extent of FEN's exposure to foreign exchange risk, it seems likely that they would have.

19. There is more uncertainty about the conclusions that would have been reached had the choice between a 13 and 15 year term for the subloans been analyzed during appraisal (para 17). Since it was agreed that the maximum subloan term would be 15 years, this was a possible, and perhaps the likely, choice. To recommend this, however, the Bank would have had to be confident that a much higher and prolonged negative funds flow from the project's financing and refinancing arrangements could be managed by FEN. At the time, FEN was a newly formed institution whose ability to raise funds from the domestic capital market had only been briefly tested under very favorable conditions (Staff Appraisal Report, para 2.13). Nevertheless, projections were made that the total resources which FEN could mobilize from local investors would increase from the equivalent of US$220 million in 1984 to US$528 million in 1987, without crowding-out effects (Staff Appraisal Report, paras 2.17 and 3.24-3.27 and Annex 5.40). In this context, and considering the advantages which the power companies and FEN would derive from a 15 year subloan term, it seems likely that the Bank would have recommended it. On the other hand, FEN apparently preferred the 13 year term. Presumably this was because after analyzing the choice FEN recognized that it would have a substantially smaller negative funds flow to finance and it attached

more importance to this than to the consequent higher exposure to foreign exchange risk. Under the circumstances, the only conclusion one can confidently reach on the choice between a 13 and a 15 year subloan term is that the Bank missed an opportunity to influence a significant decision concerning project design by failing to analyze this choice during appraisal.

Opportunities after Appraisal to Consider Alternatives to Reduce Mismatching.

20. There were two subsequent occasions when the mismatching problem should have been recognized and addressed: first, when the draft subsidiary loan agreements were proposed for Bank approval in 1984 following loan signing on June 27, 1984; and second when the Bank was considering whether to approve the six month extension of the subloan amortization period after receipt in late July 1988 of the notification from FEN that this had been done. To illustrate choices that might have been analyzed on these occasions, Table C compares the repayments by FEN on the "A" and "B" loans as actually agreed with the repayments FEN would have received on the subloans if their term were 15 years (Heading A) and if the 15 year term were also adjusted for the six month extension of the amortization period (Heading B).

21. The comparison between the 15 year subloan term (Heading A of Table C) and 13 year subloan term (Heading A of Table A) is pertinent to the analysis which should have been made on the first occasion. The results would have been similar to those discussed in para 17 but not as good: the cumulative negative peak would have been higher (US$88.7 million, or US$31.6 million more than under the arrangements actually adopted); there would have been comparable advantages to the power companies because of lower annual debt repayment obligations; and FEN's exposure to foreign exchange risk would have been substantially reduced but not virtually eliminated. As an additional part of its analysis on the first occasion, when the focus of its review was on the subsidiary loan agreements, the Bank should also have noted and become concerned about the significant mismatch between the repayment terms of the "A" and "B" loans and of the subloans. If it had, it would probably also have considered the possibility that it would still be timely to propose to amend the repayment terms of the "A" loan to extend the grace period in exchange for a reduction of the repayment period as discussed in paras 15-17. Thus, the conclusions stated in paras 18 and 19 are also applicable as of this early stage of project implementation (para 5.1). The omission of an analysis of these choices as part of the Bank's review of the subsidiary loan agreements may be attributed to the failure to assign a financial analyst to supervision of the project at that time.

22. The second occasion following appraisal which should have called the Bank's attention to the mismatching problem was FEN's decision to extend the subloan amortization period by six months. FEN's letter informing the Bank of this extension was received on July 27, 1988, five weeks prior to the date, September 1, 1988, when the first semiannual amortization repayment of the "A" loan was due. It is unrealistic to expect that, within that five week period, the Bank's review of FEN's decision would have been carried out so well and so expeditiously that the potential benefits from amending the Bank loan agreement to extend the grace period by one year in exchange for a two year reduction in the amortization

period would have been identified and that the agreement of all concerned needed to effectuate that amendment would have been obtained.

23. On the second occasion, however, it would have been both timely for the Bank to consider a longer extension of the subloan amortization period and reasonable to expect that it would examine the merits of such a step on its own initiative. As previously indicated in paras 10 and 11, the Bank's analysis of the effects of the six month extension of the subloan amortization period should have included a comparison such as in Table A between FEN's schedule for repaying the "A" and "B" loans and the subloan repayment schedule as originally specified and as modified for the six month extension. Moreover, the decision to extend the subloan amortization period was taken about six weeks after the effectiveness of the Power Sector Adjustment Loan (Loan No. 2889-CO). The Bank was no doubt aware of the financial difficulties then being experienced by the power companies in meeting their debt service requirements, and it must have assumed that this was the unstated reason for the extension. In those circumstances, one could reasonably expect that the Bank, as part of its review, would have considered whether a lengthened repayment schedule for the subloans would be advisable. Thus, the analysis should also have included a comparison of subloan repayment schedules based on 15 and 13 year subloan terms, each extended six months, with FEN's repayment obligations on the "A" and "B" loans, like that presented in Heading B of Table C and Heading B of Table A, respectively.

24. As could be expected, a comparison of extended 15 and 13 year subloan terms would have shown that the negative funds flow associated with the longer subloan term would be substantially higher and more prolonged than with the shorter term. As illustrated in Tables C and A, the cumulative negative peak would be US$103.2 million in 1992, or US$28,4 million more than US$74.8 million in 1991, and the cumulative negative differences would be sustained for 11 rather than eight years. By 1988, however, FEN's ability to raise large sums from the domestic capital market was well established. Also, as discussed in paras 7 and 12, such borrowings to finance the negative variances would not adversely affect FEN's profits. On the other hand, the comparison would have shown that an extended 15 year term would lessen the debt service burden on the power companies and FEN's exposure to foreign exchange risk. It appears, on balance, that there was a compelling case to recommend substitution of an extended 15 year term for the extended 13 year term which would have become apparent if the issues raised by FEN's decision to extend the subloan amortization period had been appropriately analyzed.

25. As described above, there have been significant adverse consequences as a result of the failure to recognize, and adopt measures to minimize, the mismatch between FEN's repayment terms on the "A" and "B" loans and the repayment terms to FEN on the subloans made from those sources. Of much greater significance, however, is the mismatch of the short repayment terms of the loan capital made available to the power companies from both foreign and domestic sources in comparison to the long construction periods and useful earning lives of the assets financed by these loans. This issue and steps FEN might take to provide suitable term transformation to the power companies to resolve this problem are discussed in paras (5.77-5.79) and Annex II. Such measures would also eliminate the mismatching problems discussed in this Annex for the period subsequent to their adoption.

TABLE A. REPAYMENTS BY FEN ON PROJECT LOANS ("A" AND "B" LOANS) AS AGREED COMPARED TO REPAYMENTS TO FEN ON SUBLOANS AS ORIGINALLY SCHEDULED AND AS MODIFIED FOR SIX MONTH EXTENSION OF SUBLOAN REPAYMENT
(US$ Millions - See note)

		Repayments on Subloans					
		A. As Originally Scheduled			B. As Modified for 6 Month Extension of Subloan Amortization Schedule		
Year	Repayments by FEN	Repayments to FEN	Difference	Cumulative Difference	Repayments to FEN	Difference	Cumulative Difference
1988	43.562	16.111	-27.451	-27.451		-43.562	-43.562
1989	50.102	38.362	-11.74	-39.191	36.696	-13.406	-56.968
1990	50.102	41.169	-8.933	-48.124	41.169	-8.933	-65.901
1991	50.102	41.169	-8.933	-57.057	41.169	-8.933	-74.834
1992	40.43	41.169	0.739	-56.318	41.169	0.739	-74.095
1993	30.148	41.169	11.021	-45.297	41.169	11.021	-63.074
1994	20.58	41.169	20.589	-24.708	41.169	20.589	-42.485
1995	13.08	41.169	28.089	3.381	41.169	28.089	-14.396
1996	13.08	41.169	28.089	31.47	41.169	28.089	13.693
1997	13.08	25.058	11.978	43.448	41.169	28.089	41.782
1998	13.08	2.807	-10.273	33.175	4.473	-8.607	33.175
1999	13.08		-13.08	20.095		-13.08	20.095
2000	13.08		-13.08	7.015		-13.08	7.015
2001	6.5		-6.5	0.515		-6.5	0.515
TOTAL	370	370.52			370.52		

NOTE:

All US$ amounts are based on stated US$ equivalent values as of the time the loans and subloans were made. They do not reflect the impact of subsequent changes in exchange rates applicable to the World Bank "A" loan of US$170 million and the Japanese Yen denominated "B" loan. Such exchange rate changes, of course, would not be applicable to the US$175 million denominated "B" loan. Specifically, for the World Bank "A" loan, the amounts shown do not reflect changes in US$ equivalent values due to the World Bank's currency pooling system affecting FEN's repayments to the World Bank and the repayments by the power companies of the portion of subloans applicable to the relending of those funds. For the Japanese Yen denominated cofinancing, the repayments by FEN are based on the exchange rate of Y220 per US$ (or a total equivalent value of US$25 million) applicable when the loan was agreed; and the repayments by the power companies are based on the US$ equivalent value thereof when the subloans were drawn down. As a result of this latter factor, the total US$ equivalent value of the subloans is shown as US$370.52 million, rather than US$369.5 million which otherwise would have been applicable allowing for the total of US$0.5 million used for the front-end fee payable to the World Bank and for consulting services to FEN.

TABLE B. REPAYMENTS BY FEN ON PROJECT LOANS ("A" AND "B" LOANS) ASSUMING MODIFIED SCHEDULE FOR "A" LOAN (15 INSTEAD OF 17 YEAR TERM, INCLUDING FIVE INSTEAD OF FOUR YEAR GRACE PERIOD) COMPARED TO REPAYMENTS TO FEN ON SUBLOANS AS ORIGINALLY SCHEDULED AND ASSUMING MODIFIED SCHEDULE (15 INSTEAD OF 13 YEAR TERM, INCLUDING FOUR YEAR GRACE PERIOD)
(US$ Millions - See note)

		Repayments on Subloans					
		A. As Originally Scheduled			B. As Modified for 15 Year Term		
Year	Modified Repayment Schedule by FEN	Repayments to FEN	Difference	Cumulative Difference	Repayments to FEN	Difference	Cumulative Difference
1988	37.022	16.111	-20.911	-20.911	13.182	-23.84	-23.84
1989	44.752	38.362	-6.39	-27.301	31.387	-13.365	-37.205
1990	52.482	41.169	-11.313	-38.614	33.684	-18.798	-56.003
1991	52.482	41.169	-11.313	-49.927	33.684	-18.798	-74.801
1992	42.81	41.169	-1.641	-51.568	33.684	-9.126	-83.927
1993	32.528	41.169	8.641	-42.927	33.684	1.156	-82.771
1994	22.96	41.169	18.209	-24.718	33.684	10.724	-72.047
1995	15.46	41.169	25.709	0.991	33.684	18.224	-53.823
1996	15.46	41.169	25.709	26.7	33.684	18.224	-35.599
1997	15.46	25.058	9.598	36.298	33.684	18.224	-17.375
1998	15.46	2.807	-12.653	23.645	33.684	18.224	0.849
1999	15.46		-15.46	8.185	20.501	5.041	5.89
2000	7.67		-7.67	0.515	2.296	-5.374	0.516
TOTAL	370	370.52			370.52		

NOTE:

The note for Table A also applies to this table.

TABLE C. REPAYMENTS BY FEN ON PROJECT LOANS ("A" AND "B" LOANS)
AS AGREED COMPARED TO REPAYMENTS TO FEN ON SUBLOANS
ASSUMING MODIFIED SCHEDULE (15 INSTEAD OF 13 YEAR TERM,
INCLUDING FOUR YEAR GRACE PERIOD)
AND MODIFIED SCHEDULE EXTENDED SIX MONTHS
(US$ Millions - See note)

		Repayments on Subloans					
		A. As Modified for 15 Year Term			B. As Modified for 15 Year Term and 6 Month Extension of Subloan Amortization Period		
Year	Repayments by Fen	Repayments to FEN	Difference	Cumulative Difference	Repayments to FEN	Difference	Cumulative Difference
1988	43.562	13.182	-30.38	-30.38		-43.562	-43.562
1989	50.102	31.387	-18.715	-49.095	30.024	-20.078	-63.64
1990	50.102	33.684	-16.418	-65.513	33.684	-16.418	-80.058
1991	50.102	33.684	-16.418	-81.931	33.684	-16.418	-96.476
1992	40.43	33.684	-6.746	-88.677	33.684	-6.746	-103.222
1993	30.148	33.684	3.536	-85.141	33.684	3.536	-99.686
1994	20.580	33.684	13.104	-72.037	33.684	13.104	-86.582
1995	13.08	33.684	20.604	-51.433	33.684	20.604	-65.978
1996	13.08	33.684	20.604	-30.829	33.684	20.604	-45.374
1997	13.08	33.684	20.604	-10.225	33.684	20.604	-24.77
1998	13.08	33.684	20.604	10.379	33.684	20.604	-4.166
1999	13.08	20.501	7.421	17.8	33.684	20.604	16.438
2000	13.08	2.296	-10.784	7.016	3.66	-9.42	7.018
2001	6.5		-6.5	0.516		-6.5	0.518
TOTAL	370	370.52			370.52		

NOTE:

The note for Table A also applies to this table.

PROJECT COMPLETION REPORT

COLOMBIA
POWER DEVELOPMENT FINANCE PROJECT
(LOAN 2401-CO)

Extended Term Transformation.

The topics discussed in this annex are organized under these main headings:

- Overview (para 1)
- Col$ Denominated Loans (paras 2-14)
- Foreign Currency Denominated Loans (paras 15-30)
- General Considerations (paras 31-47)

Policy and study recommendations are made on the following principal subjects:

- Interest rate risk; use of variable interest rates tied to the average interest costs of borrowings plus a reasonable spread to avoid such risk (paras 3, 29, 30 and 37);
- Partial capitalization of interest on Col$ denominated loans to recognize that a major part of high nominal interest rates on such loans represents compensation to maintain the real value of the loans under prevailing inflationary conditions in Colombia (paras 4 and 41);
- Grace periods, capitalization of interest during grace periods and standard repayment periods (paras 6-10);
- Maturity premia (paras 11 and 29);
- Eligibility criteria (paras 12 and 13);
- Foreign facility and foreign facility currency pool to be used for extended term transformation on foreign borrowings (paras 15-28);
- Adequacy of spreads and profit objective (paras 31-36);
- Crowding out (paras 38-40);
- Liquidity buffer (paras 42-44; and
- Minimum debt equity ratio (paras 45-47).

Overview

1. Colombian power companies have a genuine need for extended debt repayment terms so that their debt service requirements would be realistically related to their earning power (paras 5.62-5.64). To accomplish this, it is prima facie reasonable to believe that significantly longer and more systematic term transformation than now available is feasible and could be provided by FEN without undue risk, both with respect to domestic funds raised through Colombia's capital markets and foreign borrowings. This would also be consistent with FEN's expanded role, under Laws 25 and 51 of 1990, to refinance debt service obligations in order to rationalize the functioning of the energy sector (paras 5.56-5.61). The conclusions stated herein, however, should be regarded as tentative and subject to confirmation or modification after a thorough study, more complete and detailed than the limited analysis made for the purpose of this report. Moreover, these conclusions should not be regarded as a panacea but as a complement to the many other essential

remedies needed to correct deficiencies in the management, operations and pricing policies of Colombia's power utilities and power sector. Indeed, unless these deficiencies are corrected, the proposals for extended term transformation discussed herein would not be feasible.

Col$ Denominated Loans

2. Domestic Capital Markets. The domestic markets from which FEN raises Col$ resources have strengthened and matured substantially since 1982 when the initial studies for this project were made. One illustration of this is that, since 1989, there has been a free market based measure of average short term interest rates (DTF), paid by banks and other financial institutions on certificates of deposit, which FEN has used as a basis for setting variable interest rates on its four year borrowings (para 5.21). The amount of funds raised from the domestic markets by all issuers participating in them has also grown significantly. Although the orientation of these markets remains primarily short-term, apparently much of the savings attracted by the ample real interest rates payable is rolled over on maturity. Over the seven year period from the end of 1983 to the end of 1990, FEN's outstanding borrowings from the domestic markets have increased at an average annual rate of about 40% in nominal terms and 14% in real terms. Thus, it appears that FEN can fairly confidently expect that the short and medium term funds raised by it in the domestic capital markets will remain available to it indefinitely as long as it pays competitive interest rates for them, and that FEN can reasonably consider these funds as a solid foundation for providing long term loans to the power companies.

3. Interest Rate Risk. FEN would be protected from interest rate risk by specifying that the interest rate charged by it on long term Col$ denominated loans would be variable and would be tied to its average interest cost for funds borrowed from the domestic capital markets plus a specified margin (commonly called a "spread") deemed adequate to cover its operating expenses, taxes, provisions for losses, and a reasonable profit. Unfortunately, this practice was not adopted by FEN and, as pointed out in para 5.46, its profits have not always been adequate. In the future, a reasonable profit should be understood to be an amount which, together with appropriate profits from other activities, would result in total annual net earnings after taxes at least sufficient, when capitalized as part of retained earnings, to preserve the real value of FEN's stockholders' equity. The adequacy of spreads and FEN's profit objective are subjects discussed in more detail in paras 31-37.

4. Partial Capitalization of Interest. Under prevailing inflationary conditions in Colombia, a preponderant part of high nominal interest rates represents compensation to maintain the real value of the loan principal. When interest is paid on this basis, most of the payment represents real repayment of principal; this imposes a heavy burden on the borrower and reduces the average real maturity of the credit. The proposed new term transformation arrangements should relieve borrowers from this burden by capitalizing an appropriate part of the nominal interest payment. Of three methods for partially capitalizing interest analyzed during appraisal, the one identified as preferable specifies the rate of interest in advance (e.g. 8%), with the rest to be capitalized as part of the loan amount and amortized as

part of the scheduled loan repayments. Other methods which might be used would predetermine on a percentage basis either the amount to be capitalized and amortized, with the rest paid as interest, or vice versa. The first method was deemed preferable because by maintaining the amount of interest constant it facilitated financial planning and reduced administrative costs (SAR No. 4771-CO, Annex 2.1).

5. Extended Repayment Terms. Specific determination of how far to extend the repayment terms of FEN's loans to power companies needs further study. The following discussion presents criteria and general considerations pertinent in this respect.

6. Normally, grace periods during which no loan amortization is required are commensurate with the period needed to construct and place into operation the assets financed by the loan. FEN should adopt this standard for setting the grace period on its domestic loans for investment projects. To illustrate what this would mean in contrast to its present practice of a limited one year grace period, the following norms are cited. For distribution and transmission investments, a one year grace period would generally be adequate, although for a multi-year program of such investments and for some high voltage transmission projects, a longer period may be justified. Longer construction periods are needed for generation projects. Experience indicates that these can be estimated more reliably for thermal generation than for hydro electric projects. For the former, a grace period of about three years usually would be appropriate; for the latter, a grace period of at least five years generally would be required and longer periods may be needed depending on the size and complexity of the particular project.

7. FEN should have, or as necessary retain, the engineering expertise to review and be satisfied with borrower estimates of construction periods. Borrowers should understand that they will be held accountable for their mistakes in underestimating construction periods. FEN should adopt a restrictive policy on extending grace periods and providing additional finance when projects are delayed or have cost overruns - e.g. limiting relief to situations (i) which were beyond the control of the borrower and not reasonably foreseeable, and (ii) where the borrower was efficiently managed and operated and could not meet the costs from internally generated funds. If these conditions are not met and financial assistance is necessary, other conditions should be imposed, such as changes in management and adoption and implementation of measures to correct deficiencies and improve performance.

8. In addition to the length of the grace period, capitalization of interest during the grace period as part of the loan amount is another important financial policy issue. As an element of prudent policy, lenders usually require cash payment of interest during the grace period except in cases where it would be unreasonable to expect the borrower to be able to generate the required funds for this payment from operations. Typical exceptions would be a construction loan to a newly established company which has not yet begun operations, or a loan to an operating company to finance a very large addition to capacity which has a long construction period. If FEN has not already adopted such a policy, it would be advisable to do so as part of the expansion of its term transformation role. It should be noted that the policy followed

in determining whether to capitalize interest during the grace period as part of the loan amount is not dependent upon the accounting treatment of interest during construction, and vice versa. In accordance with generally accepted accounting practice in Colombia as well as elsewhere, interest costs on funds borrowed to finance plant additions, incurred during the construction or implementation period, are capitalized as part of fixed assets. Interest costs applicable to works for which the construction or implementation period is one year or less, however, may be charged to operations. This accounting practice is applicable irrespective of the source of funds to pay the interest costs.

9. Standard repayment periods, exclusive of grace periods, should be established by FEN. These should vary depending on the type of investments financed and allow longer repayment periods for loans financing assets with longer useful lives. The standards should be based on studies of funds generation which Colombian power companies would have available for debt service assuming that they were efficiently managed and had prudent capital structures (e.g. debt/equity ratios no higher than 60/40 after allowing for revaluation of assets). The studies should assume that FEN would renegotiate domestic currency loans now outstanding so that the proposed standard repayment periods would henceforth apply to them as well as future loans. They should also allow for extensions in the repayment periods of foreign debts which would result from refinancing arrangements discussed in paras 15-30. The objective should be to have prudent annual debt service coverages, say at least 1.5.

10. Debt repayment periods, exclusive of grace periods, normally would be materially less than the useful life of the asset financed, typically not more than 75-80%, and not less than 50-60%, of the life. To illustrate, repayment periods might vary from 12 to 15 years for loans financing distribution and sub-transmission assets with lives of about 20 years; 15 to 20 years for thermal generation and high voltage transmission assets with lives of 25 to 30 years, and 20 to 30 years for hydroelectric assets with lives of 40 or more years. The feasibility of shorter repayment periods at the low end of the range would generally depend upon the borrower having a relatively high equity component in total capitalization.

11. Although maturity premia are customarily part of the interest rate structure, the reasons for them are greatly diminished in cases where variable lending rates are linked to short term borrowing rates expected to be adequate to offset inflation risks. Nevertheless, there is a risk that unexpected adverse changes in conditions may occur, and this risk increases the longer the repayment term. Thus, FEN may wish to consider including modest maturity premia in its interest rate structure by charging somewhat higher spreads on loans with longer maturities. This might also be associated with offering an incentive to more credit worthy borrowers to accept shorter repayment periods. Under such an arrangement, there might be a standard range of spreads which are successively higher as the term of the loan increases, with the lower end of the range applicable to borrowers who choose and qualify for shorter repayment periods - e.g. 12 instead of 15 years for a transmission and distribution loan.

12. Eligibility and other Policy Considerations. For a power company to be eligible for FEN's financial support, whether for Col$ or foreign currency denominated loans, FEN should be satisfied that it is efficiently operated and managed and is credit worthy, or that it has adopted and is satisfactorily implementing a program which will result in its becoming so within a few years. One test of credit worthiness would be the prudence of the capital structure and the adequacy of the debt service coverage ratio (see para 9).

13. In order to limit FEN's term transformation risk, consideration should be given to adoption of a policy that requires the power companies, to the extent feasible, to give priority to use of net internally generated funds, after payment of debt service, for financing components of their investment programs with the longest useful lives and to limit their borrowings from FEN for their investment program to those elements with the shortest useful lives. Such a policy, however, will only reduce the risk, since it is likely that some FEN financing will be required for those elements of a power copmpany's investment program with the longest useful lives. This qualification is particularly relevant to a program that includes hydroelectric generation.

14. There are other policy implications of an expanded term transformation role for FEN relevant to whether its domestic borrowings would "crowd out" other borrowers and to maintenance of an adequate liquidity buffer and debt/equity ratio. These are discussed, beginning at para 38, after considering FEN's term transformation role for foreign borrowings.

Foreign Currency Denominated Loans

15. The repayment terms of foreign borrowings by the power companies are mismatched in relation to their earning power. This applies both to direct foreign borrowings by the power companies and to foreign currency denominated loans extended through FEN. As a result, many power companies have had insufficient funds available to meet all their obligations, including debt service, and it has been necessary to resort to various ad hoc solutions, including the CADEX program instituted by FEN in 1990, to provide short or medium term financing to them so that repaymnents due on foreign loans could be made. These solutions have provided only partial and temporary relief. A more systematic and transparent way to establish appropriate debt repayment obligations reasonably related to the earning power of the power companies is needed so that they would be subject to effective and realistically achievable financial discipline. (See paras 5.62 - 5.64.) To accomplish this, a potential solution which should be explored would be for FEN to establish and manage a pool of foreign resources (hereafter referred to as the "foreign facility") which would be used and made available for this purpose to all interested and qualified power companies, as described below.

16. Funding Sources. Establishment of the foreign facility would depend on obtaining the support of foreign lenders. The most likely source would be foreign commercial banks. The type of financing available for the facility probably would be limited to lines of credit which could be drawn upon for stated periods of time and which could be renewed, and medium term credits which would only be partially amortized with the balance due at maturity subject to refinancing on similar terms if the parties so agreed. The

facility should be presented to potential lenders as an important element of an effort to rationalize and improve the performance of Colombian power companies, which are to be held accountable for meeting debt service requirements reasonably related to their earning power. Thus, the presentation should emphasize that (i) the facility's objective is to refinance debt service due on outstanding and future foreign loans so that grace and repayment periods are reasonably related, respectively, to the construction or implementation period, and useful life of the assets financed; (ii) its availability is limited to qualified companies (para 12); and (iii) the interest rate and foreign exchange risks assumed by FEN would be passed on to the power companies benefiting from the facility. On this basis, lending probably would be forthcoming for the facility because it would be viewed as financially sound. Government support for this approach to foreign lenders, of course, would also be necessary; and the foreign lenders no doubt will expect that their loans to FEN for this facility would be guaranteed by the Government. In time, when the power companies have demonstrated that they have improved their efficiency and that their financial performance is sound, it may be possible to obtain funding for the foreign facility from foreign lenders without a government guarantee.

17. Whether short and medium term borrowings from foreign commercial banks will prove to be a solid foundation for FEN to provide long term loans to the power companies will depend on the continuous availability of such borrowings over many years. In turn this will depend on how well the power companies perform in meeting their debt service obligations on the extended terms made available by FEN and whether Colombia continues to be a credit worthy country. It will also depend on how well the world economy performs, since the availability of credit from foreign commercial banks would be adversely affected by poor performance of their home country economies.

18. There are clearly risks to FEN in proceeding with term transformation on the basis suggested. It is reasonable to conclude, however, that taking these risks is worthwhile, considering the advantages to be gained from establishing the foreign facility. To a limited extent, it should be possible to mitigate the risks by maintaining adequate liquidity and equity buffers (paras 42-46).

19. It may also be possible for FEN to raise funds domestically to finance the foreign facility through US$ (or other foreign currency) denominated borrowings. If this were authorized by the Government and the central bank, such borrowings might well prove to be another significant funding source for the facility. Most likely, such borrowings would have to be short term initially, with some scope for extending maturities later, and the interest rate would have to be related to dependable indices such as LIBOR or the US prime rate. As in the case of Col$ borrowings, once such a market were established in Colombia, the prospect of maintaining and gradually increasing outstanding balances from year to year should be good. At present, the foreign exchange market in Colombia has been liberalized and there is a very substantial supply of US$ available (para 5.61). If it were deemed advisable to do so, US$ (or other foreign currency) denominated borrowings could be limited to lenders who have foreign exchange to pay for the notes issued by FEN and to whom payments of interest and principal would be in foreign

exchange. Alternatively, they might simply be foreign currency denominated loans paid for in Col$.

20. Implementation Arrangements. FEN would agree with interested and qualified power companies to (i) assume their obligations under foreign loans in exchange for their agreement to repay these obligations to FEN on an extended basis, and (ii) to extend the repayment terms of FEN's foreign currency denominated loans to them (e.g. the subloans under this project or those using other external credit resources such as the Concorde and Challenger Loans). Extended grace and repayment periods would be established in accordance with standards and policies adopted after further study, as suggested in paras 5-10. The interest and amortization payment dates, with respect to month and day (e.g. June 15 and December 15) and frequency (e.g. semiannually), would remain the same under the new loan owed by a power company to FEN as under the original foreign loan assumed or extended by FEN.

21. The agreements would specify that the new loan would have two distinct components for determining its principal amount and the interest payments due thereon: an "original" and a "foreign facility" component. This distinction and the other arrangements described herein are necessary so that the foreign exchange and interest rate risks that FEN assumes or incurs in order to provide extended term financing to the power companies will be appropriately matched with those it charges to the power companies for this financing.

22. The basis for denominating principal amounts in terms of foreign currencies payable that was prescribed for the original loan (i.e. the assumed loan or the previously agreed foreign currency denominated subloan that FEN is extending) would continue to apply with respect to the original component of the new loan; the comparable basis that would be applicable to the foreign facility component would be stipulated in relation to the resources used to finance that facility (see paras 26-28). Similarly, the interest rate arrangements agreed for the original loan, plus a spread which FEN would charge on assumed loans (see para 30), would be the basis for determining the amount of interest payable on the original component of the principal; and those specified for the foreign facility (see para 29) would be the basis for determining interest payable on the foreign facility component. Repayments of principal under the new loan would depend on the grace and repayment periods agreed in each case. Subsequent to the grace period, when there would be no repayments, level repayments would be due on each repayment date. They would be level in the sense that they would represent an equal proportionate amount of the total outstanding principal of the loan (i.e. the sum of the original and foreign facility components) over the remainder of the repayment period. For example, if the new loan were to be repaid in 40 semi-annual installments, the initial repayment would be determined by dividing the outstanding total principal of the loan as valued on the repayment date by 40; the second repayment by dividing by 39; and so on. Repayments would be applied proportionately to the original and foreign facility components of the new loan's principal amount.

23. The foreign facility component of the new loan would represent two elements. First, to the extent that repayments under the new loan were less than those that were required under the original loan, that difference would

become part of the principal owed under the new loan represented by the foreign facility component. Second, any interest payments that would be capitalized as part of the loan amount only because of the provisions of the new loan would become part of the foreign facility component.

24. An <u>illustration of the proposed arrangements</u> may be useful. Initially, the original component would constitute 100% of the principal amount of the new loan. Thus, upon effectiveness of FEN's assumption of a foreign loan owed by a power company, FEN's loan portfolio would include a new loan with a principal amount identical to that of the assumed loan now part of its financial obligations. Similarly, upon effectiveness of an agreement for FEN to extend the repayment terms of a foreign currency denominated loan, a new loan would become part of its loan portfolio and it would have a principal amount identical to that of loan it replaces. In each case, the entire amount of the new loan, upon effectiveness, would be recorded as the original component.

25. As the new loans are repaid by the power companies at a slower pace than the original loans FEN has assumed or extended, FEN will need other resources to meet the principal repayments on the assumed loans and on the borrowings it made to finance the subloans which had been extended. This is also true of any interest payments which under the original loans would have been paid in cash but are to be capitalized under the new arrangements. As FEN utilizes other resources for these purposes, commensurate changes would be made in the records it maintains for its loan portfolio to record the original and foreign facility components of the new loans. This would be accomplished as the occasion requires either by:

transfers from the original to the foreign facility component recorded -

in the same amount as, and simultaneously with recording, the repayments made by FEN on an assumed loan, and

in the amount that would have been required to be repaid to FEN on the due dates as prescribed under the original terms of a foreign currency denominated subloan by FEN to a power company, had the repayment terms not been extended; or

recording interest payments capitalized as part of the loan amounts under the original component if the original loan arrangements provided for such capitalization, and under the foreign facility component if the capitalization occurs pursuant to the new extended loan arrangements.

As previously indicated, as loan repayments required under the new loan arrangements are made, the amount thereof will be allocated proportionately to reduce the original and foreign facility components of the pertinent loan.

26. <u>Foreign Facility Currency Pool</u>. It has been assumed in this discussion that the foreign facility would be funded by foreign borrowings. In order to distribute the impact of foreign exchange and interest rate changes on these borrowings fairly among all the beneficiaries of the foreign facility, it is recommended that these borrowings be maintained in a separate foreign facility

currency pool, the performance of which would serve as the basis for achieving this objective. Broadly stated, there are two choices for managing the foreign borrowings. The simplest would be for all the borrowings to be denominated in a single currency, say the US$, in which case the only relevant exchange rate would be that of the single currency chosen. The second solution would be for FEN to establish a foreign facility currency pool involving a number of foreign currencies and to allocate the foreign exchange risk in the same way as under the World Bank's currency pool so that the impact of exchange rate changes on all loan balances funded by the pool is identical. In either case, the average interest cost of the foreign borrowings made to fund the foreign facility would also serve as the basis to which a spread would be added to determine the variable lending rate charged on the foreign facility loans.

27. Under the second solution, it would be necessary to decide what limits if any should be followed with respect to the number and composition of foreign currencies to be involved. The World Bank's experience with its currency pool led it to adopt a targeted currency composition because this would simplify management of foreign exchange risks by its borrowers including facilitating hedging (see para 8.14). It is questionable whether FEN would be able to manage a pool of foreign borrowings so that it would have a dependable targeted currency composition. To accomplish this, it would be necessary for FEN to have available adequate sources of several different foreign currencies which could be drawn down and maintained in fixed proportions. Even if this proved to be possible, there would also be a question whether it would be advantageous, or deemed to be so by the power companies, to have a mix of foreign currency financing sources, with different foreign exchange and interest rate risks, rather than rely on a single foreign currency financing source such as borrowings denominated in US$.

28. There are several reasons for deciding to rely solely on US$ denominated financing for the foreign facility currency pool, without prejudice to the right to change that decision in the future if a changed course becomes advisable. Because ex ante determinations of foreign exchange and interest rate risks are very speculative, it is unlikely that there would be a sound basis for concluding that an alternative course would be advantageous. There is a very broad, large and highly competitive international market in which to obtain US$ denominated financing at variable interest rates tied to reliable indices such as LIBOR or the prime rate of major US banks. Use of other currency denominated financing would not be precluded if such financing could be swapped for a US$ denominated loan at a lower interest cost than payable for directly obtained US$ financing. Finally, this is the administratively simplest basis to use.

29. Onlending Rates. As indicated in para 26, variable lending rates for the foreign facility component of extended foreign currency denominated loans would be based on the average interest cost of the borrowings in the foreign facility currency pool plus a stipulated spread. The spread should be adequate to cover costs and contribute appropriately to meet FEN's reasonable profit objective, as suggested in para 3 for Col$ denominated loans. Instead of a constant spread for all foreign currency denominated lending, spreads may

be structured to allow for modest maturity premia, as suggested in para 11 for Col$ loans.

30. In addition, the interest payable on the original component of assumed foreign currency denominated loans would be determined by adding an appropriate spread to the interest rate payable as agreed for the original loan. Although FEN did not serve as an intermediary in the arrangements for the original loan, its agreement to assume responsibility to repay that loan under the original terms is a commitment of part of its borrowing authority for which it is entitled to some compensation. The duration of the remaining liability under the original loan which FEN assumes will be a pertinent factor in determining an appropriate spread, particularly if FEN structures spreads to allow for maturity premia. Thus, in those instances where the remaining duration is comparatively short, FEN may conclude that a relatively small spread compared to its average spread on foreign currency denominated loans would be adequate compensation for assuming liability for such loans as part of its extended term transformation efforts. No additional spread would be needed for the original component of foreign currency denominated loans extended by FEN. The spread provided under the arrangements agreed when such loans were originally made should be adequate to compensate FEN for its role as intermediary.

General Considerations

31. Adequacy of Spreads. A review of the adequacy of FEN's present practices for establishing spreads and onlending rates is one of the matters dealt with herein requiring further study . The purpose of this review would be to determine what changes may be needed and would be feasible to improve FEN's overall level of profitability and the distribution thereof among its various sources for generating profits. Paras 3 and 11 (and para 29 by reference thereto) contain brief statements of suggested principles applicable in these respects. Additional comments pertinent to the recommended review follow under three sub-headings.

32. a. Profit Objective. Para 3 suggests that a reasonable profit objective for FEN is an amount of annual net earnings after taxes at least sufficient, when capitalized as part of retained earnings, to preserve the real value of FEN's stockholders' equity. This is equivalent to stating that FEN's nominal annual rate of return on its average equity for each year should be at least equal to the average rate of inflation for the year and that all of its earnings should be retained rather than distributed. In actuality, except for a very small amount of dividends paid in cash, it is FEN's policy to retain all of its net earnings after taxes. As pointed out in the main text (paras 5.46 and 5.66 and Table 5.1) , however, FEN's after tax rate of return on average equity has been less than the rate of inflation in each of the years 1985-1990. As a result, the value of FEN's stockholders' equity has depreciated in real terms by about 11% over the period from the end of 1983 to the end of 1990.

33. The proposed profit objective is quite modest, identical to stating that the real rate of return on equity should not be less than zero. This may be justified on the grounds that FEN functions basically as a service company

that provides essential services and assistance to affiliated Colombian power companies by arranging financing for them, and to the Government by monitoring the financial performance of the power companies and strengthening power sector financial management. As such, it may be concluded that FEN's financial performance would be satisfactory if it provided the services at no profit and no loss in real terms, which is what would be required in the USA with respect to dealings between a service company and affiliated utilities. An alternative view would be that FEN is not simply operating as a service company but also as a financiera taking risks in extending credit to the power companies, and that it should be compensated for this risk by earning rates of return on equity approaching but not in excess of those earned by privately owned financieras in Colombia. Under the latter view, the zero real rate of return on equity would be a minimum profit objective, and a maximum rate of return on equity that was deemed reasonable would have to be established as the maximum profit objective. The increase in capital resulting from earning and retaining a positive real return on equity would be advantageous because it would support an expanded lending program to the power companies in real terms, without calling on the Government to fund increases in FEN's equity capital base to that extent. Clarification of FEN's profit objectives will be necessary as part of the review of the adequacy of spreads.

34. b. Distribution of Profits among Revenue Sources. FEN's two principal revenue sources are peso and foreign currency loans. If it were feasible, it would be desirable for FEN to earn approximately the same rate of profit on all of its loans so that each of its borrowers would contribute to FEN's profits proportionally to its use of FEN's lending facilities. As a practical matter, this ideal distribution of profits cannot be realized. For example, if maturity premia are introduced into the lending rate structure as suggested in paras 11 and 29, the ideal would have to be modified to achieve uniform profit margins on loans with comparable maturities. More fundamentally, it must be recognized that both the amount of net profit produced by any given amount of spread (e.g. 0.5%) and its percentage relationship to equity will vary over time as costs other than borrowing costs, the volume of lending operations over which these costs may be distributed, the amount of income earned on investments, the extent to which equity capital is utilized for lending purposes, and the amount of the equity base vary. Accordingly, appropriate changes in interest rate margins may be necessary from time to time to achieve desired profit objectives. This may be the reason for the range of margins, from 0.5% to 0.9% per annum over its interest cost for borrowing foreign funds, that FEN has used to set its lending rates for foreign currency loans (FEN Annual Report for 1989, English version, page 20). Moreover, to the extent that FEN's profit objective includes a positive real return on equity, the judgment as to the specific amount of return, or range of returns, deemed reasonable may vary from time to time as circumstances change. Thus, the objective of a uniform rate of profit on all loans can only be applied prospectively and imperfectly when spreads over average borrowing costs are periodically established as the basis for determining lending rates to be charged for future loans. If an identical spread, or a uniform scale of spreads related to loan maturity, is applicable for all loans, whether peso or foreign, that is the most that may be accomplished to achieve the desired profit objective while adhering to the ideal distribution of profits as closely as possible. Similarly, other loan charges such as commitment fees

should be applicable uniformly for all loans. There should be an appropriate justification for any departure from this approach; e.g. charging higher spreads and thus earning higher profits for riskier loans.

35. The initial step in carrying out the review of the adequacy of FEN's interest rate margins would be to determine the annual amount of profits realized in past years from each of the peso and foreign currency loan categories and compare this to the average annual amount of loans outstanding in each category. This would identify the extent of differences in average profit rates for the two categories. A separate component of this analysis would be a comparison of the average gross spreads earned for each category measured by the differences between direct operating income from, and expenses for, interest and commissions, as a percentage of the average amount of loans outstanding. If the resulting differences in profit rates or spreads are significant, the analysis should be extended to identify the principal factors accounting for the differences. A number of technical points affecting this analysis are discussed below.

(i) The average annual amount of loans outstanding in each category should preferably be calculated on the basis of month or quarter end balances to minimize distortions due to uneven changes in outstanding amounts during the course of the year.

(ii) Income on Investments. FEN also earns income on peso and foreign currency investments, which essentially represent holdings acquired as part of liquidity buffers maintained for each of the lending activities. To the extent that it is possible to determine that borrowings were the source of funds utilized to acquire these investments, the pertinent interest and commission costs of such borrowings should be subtracted from the income (interest, commissions, amortized discounts and monetary correction) derived from the investments. The resulting net income or loss should be attributed to the pertinent lending category and treated either as a source of income in addition to that derived from the spreads, or an additional item of expense, pertinent to the lending category.

(iii) Peso loans may be financed from equity capital as well as from borrowings. This should be assumed to be the case whenever the amount of peso loans (factor A) is greater than the amount of peso borrowings considered to be the source of funding such loans (factor B). In that event, the total interest and commission income from peso loans should be allocated to the two sources. The portion of this total obtained by applying the ratio of factor B over factor A should be considered the direct income obtained from peso loans financed from peso borrowings. This should be compared with the interest and commission expenses attributable to the amount of borrowings utilized to finance peso loans to calculate the average gross spreads on peso loans. The balance of the total direct income from peso loans should be treated as a source of income in addition to that derived from spreads.

(iv) Foreign Loans under Power Development Finance Project. Foreign loans have been financed exclusively from foreign borrowings, and,

except for interest spreads, there has been a precise symmetry (or nearly so) between the terms of the foreign borrowings and the loans financed by them. The one and only instance in which there has not been such a symmetry occurred under this Power Development Finance Project. In this case, as pointed out in the main text, there was a mismatching between the repayment terms of the foreign borrowings and the subloans financed by them, which was accentuated by FEN's decision in 1988 to extend the subloan amortization period by six months (para 5.47). For the years beginning with 1988, the gross spreads on these subloans should be calculated separately from that for other foreign loans. This separate calculation should include, as an element of direct income in addition to interest, the exchange rate adjustments applicable to these subloans, including the amounts thereof credited both to direct operating income and to stockholders' equity (see Annex I, paras. 8 and 9). It should also include, as an element of direct expense in addition to the interest costs on the foreign borrowings, the interest and commission costs attributable to the peso borrowings incurred to meet repayment obligations on the foreign loans in excess of the amounts repaid under the subloans for as long as necessary until this deficiency is made up (see Annex I, paras. 10-13 and Table A).

(v) Allocation of Expenses other than Borrowing Costs. To calculate the amount of net profits attributable to peso and foreign loans, it will be necessary to allocate the net expenses resulting from all other items of income and expense, both operating and non-operating, other than borrowing and investments. Except for income taxes, it is suggested that this allocation be made in proportion to the average amounts of outstanding loans in each category. Income taxes could be allocated in proportion to the earnings before income taxes of each category, excluding that portion of credits for exchange rate adjustments made directly to stockholders' equity.

(vi) Losses on Fiduciary Account Administering Social Security Reserves. FEN's expenses in 1989 include a special provision of Col$752.3 million for a deficit that had accumulated to the end of that year in a fiduciary account which FEN had been managing since November 1984. Of this amount, losses had been incurred in the amount of Col$286.1 million for 1989, Col$348.7 for 1988 and Col$117.5 million in prior years. In 1990, FEN's expenses include a provision of Col$119.5 million for that year's loss in this account. The resources administered through this account were provided by the Social Security Institute (ISS) in exchange for obligations (identical to those for Constant Value Social Security Bonds) to repay them at a value related to inflation plus interest of 5.5% per year on the adjusted value. The contract under which FEN administered these resources required it to account for any losses resulting from financial and credit decisions which produced earnings less than the cost of the resources. The provision charging the accumulated deficit in this account to FEN's earnings for 1989 was made at the direction of the Banking Superintendency. FEN's responsibility to make up the losses sustained in this account was confirmed in Law 48 of December 25, 1990. That law also provided for the termination as of 1991 of the fiduciary administration contract and the simultaneous

transfer to FEN of ownership of the assets previously administered thereunder, so that these assets and the corresponding liabilities will henceforth be reported in FEN's financial statements. In calculating annual profits from peso lending, the expense charged in each of the years 1988-1990 for the loss sustained on this account should be limited to the amount attributable to that year's results. For years prior to 1988 if the information is readily available, the yearly loss (or gain if any) in this account should be included in the calculation, or the cumulative loss from inception to the end of 1987 charged to 1987. Beginning with 1991, the ISS funds should simply be considered as an additional source of domestic borrowings available to FEN for its peso lending activities; the uses made of these funds will no longer be separately identifiable and their costs should be treated as part of the costs of the pool of domestic borrowings. The lessons learned from this experience should include FEN's belated recognition, noted in its Annual Report for 1990 (English version, pages 16-17), that inadequate spreads were charged for relending the ISS resources and that better returns could be achieved from investing the surplus funds. Additional information about this special fiduciary account is set forth in the addendum to this Annex.

36. After completing the analysis of historical results, a comparable analysis should be made for 1992 and at least one but preferably several subsequent years based on forecasts of FEN's financial performance. The object should be to determine a schedule of spreads that is judged to be feasible to implement and reasonably likely to produce the desired rate of return on equity. In preparing the forecasts, it will be necessary, of course, to take into account the spread and lending rate arrangements already contractually agreed for loans made by FEN and those to be committed pursuant to arrangements specified in FEN's agreements with its lenders. As suggested in para 9, however, if the recommendations made herein for extended term transformation are adopted, FEN will be able to apply new spread and lending rate arrangements not only to future peso loans but also to presently outstanding peso loans which would be renegotiated. Similarly, there will be a substantial potential for FEN to adopt and implement new spread and lending rate arrangements for foreign loans which it would assume, and for the extended term portion of outstanding foreign loans which it would renegotiate (see para 22). FEN's ability to renegotiate outstanding foreign loans and to apply new terms to future foreign loans to be funded from outstanding credits may be subject to obtaining necessary approvals from its lenders. The financial forecasts should make appropriate allowance for these potentials.

37. <u>Frequency of Adjustment of Lending Rates</u>. To ensure that FEN's lending rates appropriately reflect its current borrowing costs, FEN should standardize its practices in this respect. It is suggested that its policy should be to apply stipulated spreads to average borrowing costs to determine new lending rates at least semi-annually, and perhaps quarterly. It is also suggested that interest should accrue based on the new lending rate from the time that the new rate is effective.

38. <u>Crowding Out</u>. The question whether FEN's borrowings from the domestic capital market would "crowd out" other borrowers has been raised and answered

in the negative during project appraisal (SAR No. 4771-CO, paras 3.26 and 3.27) and during project implementation when FEN's potential for mobilizing domestic savings was evaluated (see reports of experts referred to in paras 5.15 and 5.18). At the time of appraisal, access to the domestic capital market was regulated by the Government (SAR No. 4771-CO, paras 2.13 and 2.14). Since November 1990, however, FEN is no longer subject to Government control in this respect, and it appears that it is free to compete for resources from the domestic capital market to raise the amounts it deems necessary to fund its activities (para 5.57). On this basis, and on the assumption that other sources of domestic finance are free to compete with FEN in offering financial assistance to the power companies, the question of crowding out may not be pertinent. Because the power sector is an important productive sector, it may be argued that it should be able to compete, directly or through FEN or other lenders, for resources from the domestic capital market, so long as it does so without any special advantages or preferences provided by the government. This reasoning would be strengthened if the power sector were operated and managed efficiently, but despite the shortcomings in this respect, the argument may be valid. Nevertheless, in view of the magnitude of FEN's expanded participation in domestic capital markets to obtain resources to support the extension of power company debt repayment terms, as pointed out in para 39, it is likely that both the Bank and Colombian authorities will wish to consider this question again as part of the evaluation of FEN's expanded term transformation role.

39. The one third increase in FEN's Col$ borrowings which occurred in the last two months of 1990, and the phenomenal 440% increase in 1991, were necessary principally to support its CADEX program to provide assistance to power companies to meet foreign debt service requirements. In addition, the Col$19.76 billion increase in equity provided to FEN by the Government in December 1990 was used for this purpose. (Paras 5.59-5.61). In US$ terms, using year end exchange rates, the increase in Col$ borrowings in the last two months of 1990 was equivalent to about US$28 million, the increase in equity in December 1990 to about US$35 million, and the increase in Col$ borrowings in 1991 to about US$438 million. No information is available concerning the continuing requirements FEN may have under the CADEX program to maintain and increase its borrowings from the domestic capital market. This will depend on how fast the power companies can realistically repay the Col$ loans made to them under the CADEX program and what additional Col$ loans they will need to meet future debt service payments on outstanding foreign loans. It appears that all the Col$ loans made under the CADEX program in 1990 were short term (para 5.60). It is unlikely, however, that the full amount of these loans and the much larger amount of Col$ loans made in 1991 could be repaid within a year or less, although to some extent they may have been bridge loans expected to be repaid within the short term. In addition, it is likely that the power companies will need additional financing assistance to meet future foreign debt service requirements. Thus, on balance, FEN may have to raise substantial additional amounts from the domestic capital market in 1992 and subsequent years to support the CADEX program as currently being implemented.

40. An alternative and preferable solution to the problems power companies are experiencing in meeting their foreign debt service requirements would be the foreign facility which FEN would establish and manage, as discussed herein

(paras 15 - 30). Implementation of this proposal would relieve the domestic capital markets from the very substantial demands for funds which FEN would require for the CADEX program as now being executed. Although comparable resources would have to be obtained from foreign capital markets, those markets are many times greater than the Colombian market. Moreover, in financing the power sector, it would be better fiscal policy, and consistent with long standing Colombian practice and policy, to borrow foreign funds to meet foreign costs, including foreign debt service costs, when internally generated funds are insufficient to pay such costs.

41. If a decision is made to rely on Col$ borrowings to meet part of the funds needed to extend the repayment terms of foreign loans, this assistance should be provided on a more systematic basis than now being used. One possibility would be to modify the procedures discussed herein for the foreign facility to include a domestic facility which could be utilized as a substitute source of funding the extension of the repayment terms of foreign loans (see paras 20 -25). If this were to be done, partial capitalization of interest, as recommended in para 4, should also be applicable.

42. Liquidity Buffer. Because of FEN's reliance on term transformation and the risk of collection delays, it was agreed during appraisal and confirmed during negotiations that it would maintain at all times a liquidity buffer equivalent to not less than two months (1/6) of estimated annual expenses plus one month (1/12) of the principal amount that would become due and payable to local investors during the year (SAR No. 4771-CO, para 2.31). The estimates of expenditures and principal repayments on which these requirements would be based are to be made in February of each year, and one half of the total requirements are to be held in assets which could be converted into cash within 90 days and the other half within 30 days (Loan Agreement, Section 4.06). As an additional protective measure needed because of FEN's reliance on term transformation, it was also agreed as a condition of effectiveness that FEN would be provided with access to short term borrowings from the Central Bank to cushion it from an unexpected drop in savings mobilization, similar to that available to other financial intermediaries. This would provide coverage for short term liquidity problems resulting from an unexpected drop in savings mobilization. It was expected that FEN's quota in this respect would be 100% of paid in capital and legal reserves for a maximum of 90 days annually. (SAR No. 4771-CO, para 2.12; Loan Agreement, Section 6.01.) During implementation, in 1985, FEN requested a reduction of the minimum liquidity requirement but subsequently withdrew the request (paras 5.24 -5.25).

43. An analysis of FEN's audited financial statements for 1990 indicates that FEN met the minimum liquidity requirements with a comfortable margin. Applying the definitions of Section 4.06 of the Loan Agreement in retrospect, rather than prospectively based on estimates as literally required, 1/6 of expenditures in 1990 was about Col$12.5 billion. Assuming that the total outstanding Col$ debt at year end would be repayable within a year, which is an overstatement, 1/12 of the principal due to local investors was about Col$5.5 billion. This results in a total minimum liquidity requirement of Col$18 billion, or US$31.5 million at the year end exchange rate. The auditors report that at the year end, FEN had assets convertible into cash in

less than 30 and 60 days, respectively, of Col$22.2 billion and Col$19.9 billion, well in excess of the minimum requirement of Col$9 billion in each category (Auditors' Report for 1990, section on compliance with accounting and financial clauses of Loan No. 2401 CO). Using rough estimates of the impact on interest and principal payment requirements resulting from the very large increase of domestic borrowings which occurred in 1991 ((para 5.61), total minimum liquidity requirements may have increased by Col$33 billion to Col$51 billion, or US$79 million at the year end exchange rate.

44. The present minimum liquidity requirements were established at a time when it was expected that (i) FEN's receipts from repayments of foreign currency denominated loans would match its expenditures to repay its foreign currency borrowings and (ii) FEN's term transformation activities would be limited to Col$ borrowing and lending. With the expansion of FEN's role to include term transformation of foreign currency denominated borrowing for the power sector, the minimum liquidity requirements should make an allowance for FEN's annual requirements to repay foreign as well as domestic loans. For example, the liquidity requirement could be reformulated to refer to FEN's total, rather than local, principal repayment requirements for the year as the base for computing the 1/12 component of the requirement. The determination of what would be a prudent liquidity buffer under FEN's expanded, and riskier, term transformation role, is an important aspect of the studies recommended hereunder. In this context, of course, allowance should be made for the income earning potential of short term investments as an offset to the costs of maintaining the liquidity buffer. Taking this into account, it may be the case that the net costs of maintaining a large liquidity buffer may not be so significant. Also, of course, the availability of a liquidity quota from the Central Bank would also be considered. Assuming that this is still available in an amount equivalent to 100% of paid in capital plus legal reserves, at year end 1990, it would have amounted to a line of credit of Col$54.5 billion or US$96 million, that could be utilized for a maximum of 90 days annually.

45. Debt Equity Ratio. FEN undertook to maintain its debt equity ratio within the limit of 7 to 1, under the agreements for this project. As explained in paras. 5.49-5.55, this limit was exceeded in the period 1988-1990 under circumstances such that the Bank granted temporary exceptions through Dec. 31, 1990. It was expected that the additions to FEN's equity, which the Government was authorized to make under Law 25 of 1990, would bring FEN back into compliance with the 7 to 1 limit, but the Bank has no information as to whether this in fact has occurred or is likely to occur in the near future.

46. Maintenance of a prudent debt equity ratio is another measure to protect FEN from the risks involved in its term transformation activities because of inability to obtain funds from expected refinancing of part of its debts or from scheduled repayments of loans by some of its borrowers. Considering that the 7 to 1 limit established at the beginning of its operations was a relatively high limit and that its risks are increasing as a result of its expanded term transformation role, any increase in the 7 to 1 limit at this time would be of dubious merit. Some clarifications of definitions and details of the calculation, however, would be appropriate (paras 5.50-5.52).

47. In addition to sources of increased Government contributions to FEN's equity specified in Law 25 of 1990, another significant source may be the prepayment of outstanding foreign loans to power companies which the Government is now considering, as a result of Colombia's recent significant improvement in its balance of payments and foreign exchange positions. The Government has not yet indicated how this would be accomplished in relation to the power companies which are the borrowers of the loans which may be prepaid. To maintain appropriate financial discipline on the part of the power companies, one method that may be advisable would be for the Government to make the prepayment in exchange for a note from the power companies to continue to service the amount prepaid by the Government, and for the Government to transfer the note to FEN as an equity contribution. The terms of the note, under which service of the amount prepaid would continue, might be the same as would have continued to apply if the prepayment were not made. More appropriately, the repayment period should be extended as suggested in para 20, and the foreign exchange risks and interest bases might be simplified as suggested in para 28.

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ADDENDUM

Information about the funds of the Social Security Institute (ISS) which FEN has been administering in a fiduciary capacity is contained in the Audited Financial Statements for 1988-1987, Annex C, pages 30-31: Audited Financial Statements for 1989, Note 20 and Schedules 1,2 and 3; and FEN's Annual Report (English version) for 1989, pages 14-16 and for 1990, pages 12, 13, 16 and 17. In the appraisal report (SAR No. 4771 - CO, para 2.10 and Annexes 2.2 and 2.5), these funds were treated on the basis that they would be reported as part of FEN's financial statements, with the resources shown as liabilities under the caption "Official Funds", their uses as assets and the attributable income and expenses under pertinent categories on the Income Statement. The SAR states that the resources made available from this source on a monthly basis represent proceeds of Constant Value Bonds issued by ISS to be managed by FEN and are to be repaid over 25 years at 5.5 percentage points above their inflation adjusted value.

The use of the ISS resources was limited to financing the acquisition by power companies of domestically produced goods and services (a restriction which was lifted by Law 25 of 1990) and to make short and medium term temporary investments in high yield liquid securities. (FEN's Annual Report for 1989, English version, pages 14 and 16). As of the end of 1989, loans and investments in this account totalled Col$11 billion, of which loans were 31% and investments 69%. Since inception of the account in November 1984, total income earned on loans and investments has been insufficient to cover total costs, of which about 93% represents the costs of the funds provided by ISS and 7% commissions paid to FEN (Audited Financial Statements for 1989, Schedule 3 and for 1988 and 1987, Annex C). FEN's Annual Report for 1989 states that because there was little demand for these resources on the terms provided, it was difficult to administer them profitably. No explanation is provided as to why the account's surplus funds could not be invested at yields higher than the cost of the funds, which in 1989 appears to have been about 29%.

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Santafé de Bogotá, D.C., - 3 ENE. 1992

Señor
GRAHAM SMITH
Jefe División Infraestructura y Energía
Departamento III
Oficina Regional para America Latina
y El Caribe
Banco Mundial
Washington D.C.

Apreciado señor Smith:

En atención al Informe de Terminación de Proyectos correspondiente al Préstamo 2401-CO entre el Banco Mundial y la FEN, me permito hacer a continuación los siguientes comentarios:

1. Parágrafos 3.01, 4.01 y 4.05. En cuanto a los objetivos del Préstamo, el Informe hace énfasis en que desde su creación la FEN debió ejercer funciones como Banco de Desarrollo. Si bien en la época de evaluación del crédito y de la negociación de las minutas del contrato éste fue enunciado como uno entre varios propósitos, se dió muchísima más importancia al objetivo de apoyar a Colombia en sus esfuerzos para completar una oferta eléctrica que diera respaldo al desarrollo y al empleo. Por tanto, el propósito fundamental expresado entonces fue asegurar la construcción de proyectos de expansión eléctrica para evitar racionamientos. No creemos que misiones de asesoría a FEN en junio y noviembre de 1982 hayan logrado avances en la constitución de la FEN como Banco de Desarrollo cuando la entidad apenas empezó a funcionar a finales de 1982 con una preocupación básica centrada en su capitalización proveniente de los recursos del Fondo de Desarrollo Eléctrico, administrado por el Banco de la República. Según nuestros registros escritos, y la "tradición oral" el origen de la FEN fue bien diferente al que se quiere señalar en el Informe. Al tiempo, otras actividades iniciales fueron la captación de ahorro local y la transferencia de recursos mediante el mecanismo del redescuento, antes que la conformación de una entidad para el control y la coordinación financiera sectorial.

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2. Parágrafo 4.08. El papel de la FEN. Siendo cierto lo anterior, no es válida la afirmación de que un aspecto central del crédito fuera el papel de la FEN como Banco de Desarrollo para el sector eléctrico. Realmente los mayores esfuerzos tendieron al cumplimiento del objetivo destacado en el punto anterior y se vió a la FEN más como un canal de recursos, primero en moneda local y luego en divisas, hacia las empresas del sector eléctrico. Tan solo tres o cuatro años después se empezó a promover la transformación de la FEN para que se dedicara a los propósitos que se mencionan en el Informe tendientes al control y manejo de la situación financiera sectorial.

3. Parágrafo 4.09. Uno de los factores que condujeron a la situación mencionada era el papel que jugaba ISA en el sector eléctrico por la época. Ciertamente, en el Gobierno Nacional, particularmente en el Ministerio de Minas y Energía, y también en el propio Banco, se mostró una gran cautela en cuanto a que FEN asumiera desde un comienzo funciones de control y coordinación que venía desempeñando ISA. En la práctica, durante el período 1983-1986 ISA continuó manejando la coordinación técnica y financiera del sector, mientras que la FEN se dedicó a la consecución de los recursos que demandaran las empresas para cumplir sus planes de expansión.

   Como resultado, ni en la FEN ni en el Gobierno, ni en el propio Banco, hubo las condiciones propicias para que la nueva entidad asumiera funciones de liderazgo en las finanzas sectoriales.

4. Las transformaciones al interior del manejo sectorial fueron muy graduales. Como lo anota el Informe, por primera vez en mayo de 1983 el Gobierno asumió un papel decisivo en las definiciones sobre el plan de expansión eléctrica, cuando el CONPES debatió el tema. Entonces se consideró que el crecimiento de la demanda de energía eléctrica estaría bastante por debajo de los pronósticos del sector y que por tanto se podía aplazar notablemente la construcción de nuevos proyectos de generación. Fue también la primera vez en la que se mencionaron las necesarias correlaciones entre el desarrollo eléctrico y el plan macroeconómico y se empezaron a evidenciar las restricciones financieras derivadas del alto endeudamiento.

   El resultado ha sido que tan solo un proyecto nuevo se ha iniciado desde ese año. Es el caso de la Central Hidroeléctrica de Riogrande II, en cuya definición primó el que se trataba de una obra de múltiple propósito, por lo que su importancia para cubrir las necesidades de agua potable en el área de Medellín fue decisiva. Los demás proyectos en los planes de expansión preparados por el sector, aún desde 1977, están pendientes de una definición sobre la fecha en que deba iniciarse la construcción de sus obras principales.

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En cuanto al aspecto financiero, entre 1986 y 1987 hizo crisis la desconfianza manifestada por el propio Gobierno Nacional hacia el papel de ISA en estas materias. Es así como en la definición del plan de ajuste la administración del período 1986-1990, se encomendó a la FEN la preparación de las proyecciones financieras y el seguimiento de las mismas, labor que sirvió como referencia para la contratación del Crédito 2889-CO entre el Banco y la República de Colombia.

5. Parágrafo 5.07. Otro tema del Informe, sobre el papel de la FEN en los años anteriores, se refiere a la evaluación de los préstamos. Hasta finales de 1990 la FEN solamente otorgó créditos destinados a la inversión. En general, esos créditos, incluídos los provenientes del Préstamo 2401-CO, tuvieron como propósito complementar las fuentes de financiación de proyectos en construcción, muchos de los cuales habían sido examinados previamente por el Banco Mundial o el BID. Por lo anterior, se consideró que no era necesario un nuevo proceso de evaluación dado que esos proyectos tenían estudios de prefactibilidad, factibilidad y diseño e informes de evaluación de uno u otro banco. Sin embargo, la FEN desde 1987 ha constituído grupos de evaluación para los nuevos proyectos, con base en la metodología desarrollada con ocasión del Préstamo BID 237/IC-CO. Internamente el proceso de asignación de créditos contempla el análisis técnico, económico, financiero e institucional tanto de los proyectos como de las empresas solicitantes de los recursos. El documento de evaluación es sometido a la consideración del Comité Interno de Crédito quien presenta recomendaciones a la Presidencia de la FEN y ésta a la Junta Directiva.

6. Parágrafos 5.08 y 5.09. La base de los modelos de proyecciones utilizados en la FEN y por el sector eléctrico proviene de los modelos utilizados por el BID (SPMOD) los cuales han sido revisados y mejorados en la FEN, con el reconocimiento del propio BID. Estos modelos reemplazaron el modelo FAST utilizado por ISA y el Banco Mundial, con la aceptación de este último.

Por tanto, las críticas sobre el particular deberían resolverse conjuntamente con los bancos multilaterales.

En cuanto a la información es evidente la dificultad en su manejo, sobre todo cuando hay tantas entidades a cuyo cargo se tienen parámetros fundamentales en la preparación de las proyecciones (escenario macroeconómico, tarifas, balance energético, inversiones, etc.) y, además, teniendo en cuenta la gran complejidad institucional del sector eléctrico. Lo anterior hace que se requieran modelos que representen adecuadamente estas características. Solo modelos con algún nivel de detalle pueden producir proyecciones que sean cercanamente representativos de la posible evolución del sector. Desde luego es conveniente tener modelos más

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mencionados en el Informe relativos a la excelente imagen con que cuenta la entidad entre los ahorradores y a los mecanismos de captación desarrollados durante su existencia. Estos recursos se han trasladado en créditos a las empresas, principalmente destinados al servicio de la deuda que cuenta con Garantía de la Nación.

8. Parágrafos 5.39 y 5.40. Como ya se mencionó también ha sido gradual el proceso de transformación de la FEN, el cual se concretó con las reformas legales efectuadas entre 1990 y 1991. En primer lugar, con la Ley 25 de 1990 y su Decreto Reglamentario 1806/90, que la convirtiera en la Financiera Energética Nacional S.A. - FEN, ampliando su radio de acción tanto en lo relativo a las empresas a las que puede otorgarles crédito como en cuanto a los rubros elegibles para financiación. Además, se cambió el régimen de garantías.

   También durante 1990, una nueva reforma, permitió a la FEN otorgar créditos directos en moneda local haciendo que el redescuento fuera una opción para la colocación de los créditos locales, pero ya no la única alternativa. En 1991, con la reforma financiera, se dieron mayores posibilidades a la FEN, inscribiéndola dentro del régimen correspondiente a las Corporaciones Financieras, por lo que la entidad tendrá mayor flexibilidad en el desarrollo de sus actividades frente al sector de energía (sobre estos temas hay explicaciones más detalladas en los documentos preparados por la FEN y entregados al Banco Mundial sobre el tema de la cláusula de prenda negativa.)

   Todas las transformaciones mencionadas a lo largo de varios años posibilitan una efectiva función de la FEN como Banco de Desarrollo, controlador de la gestión financiera de las Empresas. Este papel ha sido confirmado por el Gobierno Nacional durante la presente Administración, la cual definió el plan de reforma del sector en el documento aprobado por el CONPES el 21 de mayo de este año, "Estrategia para la Reestructuración del Sector Eléctrico". Allí se definen las tareas de las diferentes entidades y, en particular, a la FEN se le asigna la suscripción de convenios de desempeño con las principales empresas del sector donde se les definan metas de gestión.

9. Se hace mención también en el Informe a que la FEN se ha convertido en una ventana cuasi-fiscal de recursos hacia el sector eléctrico a través de la capitalización de la entidad. Esta apreciación no corresponde a la realidad, puesto que las capitalizaciones de la FEN han provenido originalmente del traslado de los recursos existentes en el Fondo de Desarrollo Eléctrico y más adelante casi en su totalidad de las propias utilidades de la FEN. El manejo de los recursos y la colocación de los créditos han sido los correspondientes a una entidad financiera vigilada por la Superintendencia Bancaria, buscando preservar la sanidad y estabilidad de la empresa en beneficio del proceso de ajuste del sector

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simplificados, los cuales ya se han desarrollado también, pero éllos solamente deben utilizarse para ciertos análisis de sensibilidad, luego de haber calculado los órdenes de magnitud de las proyecciones con los modelos más detallados.

7. Parágrafo 5.18. Sobre el tema de la movilización de fondos en moneda local, el Informe plantea que la FEN en sus primeros años no pudo llevar a la práctica un traslado masivo de recursos. Se explica, con razón, que la principal causa estriba en primer lugar en el tamaño reducido del sector financiero colombiano, pero también en la desconfianza de los bancos y corporaciones hacia las entidades del sector eléctrico. Sin embargo, no se hace referencia a que el nivel de las captaciones y las condiciones financieras de las mismas estaban regidas por las autoridades monetarias con fuertes restricciones, en particular en cuanto a su volumen. Todo ello condujo a que no se cumplieran las metas sobre el particular establecidas originalmente. Lo anterior cambió drásticamente en el último año. En efecto, en noviembre de 1990 la Junta Monetaria levantó las limitaciones a la FEN para sus captaciones tanto en los montos como en las tasas de interés. Entonces el nivel de títulos de la FEN en circulación en el mercado local ascendía a unos 54.500 millones. La cifra pasó a unos 66.000 millones en diciembre de 1990 y luego ha tenido la siguiente evolución durante el transcurso del presente año:

TITULOS FEN EN CIRCULACION, 1991

FIN DE	$ MILLONES
Marzo	128.818.0
Junio	222.472.8
Septiembre	297.928.2
Diciembre	356.893.7

En un año el nivel de captaciones se ha hecho más de seis veces mayor, lo cual es un resultado del conjunto de medidas relativas a la transformación de la FEN ya expuesto y, desde luego, a los dos elementos

Calle 71A Nº 6-30 piso 20 Bogotá, D.E. Colombia Tels (57-1) 2172100 Fax (57-1) 2119776 Télex 44307 FENCO

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eléctrico y del buen cuidado de los recursos colocados en la FEN tanto por los ahorradores locales como por los bancos internacionales y por el propio Gobierno.

El comentario del Banco parece referirse al mecanismo del Fondo de Monedas Extranjeras (FODEX), con cuentas tanto del Gobierno Nacional como del Banco de la República, que sirvieron para atender obligaciones de varias entidades, principalmente del sector eléctrico, con el exterior. Recientemente (desde hace un año, aproximadamente), la FEN ha establecido una línea de crédito para otorgar préstamos a las empresas también con el objeto de que sirvan oportunamente su deuda externa. Sin embargo, la asignación de estos préstamos se hace también a través del proceso crediticio de la FEN, dando cumplimiento a los principios establecidos en el Reglamento de Crédito de la Financiera. Por tanto, los incumplimientos de las empresas en sus obligaciones con la FEN conducirían a que se suspendan los desembolsos y a la eventual aceleración de los créditos.

Espero que estos comentarios sean de utilidad para ustedes en la preparación del Informe definitivo. Con gusto estaremos dispuestos a discutirlos con ustedes si lo consideran necesario.

Cordial saludo,

CESAR GONZALEZ MUÑOZ
Presidente

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