

**REGULATORY FRAMEWORK FOR THE NATURAL GAS SUBSECTOR
AND STRENGTHENING OF THE ENERGY REGULATORY COMMISSION**

(TC-95-02-23-9)

EXECUTIVE SUMMARY

EXECUTING AGENCY: Comisión Reguladora de Energía (CRE) [Energy Regulatory Commission], a deconcentrated unit of the Ministry of Energy.

MIF FACILITY: Technical Cooperation (Facility I)

FINANCING:

MIF:	US\$1.5 million
Local counterpart funding:	US\$1.5 million
Total:	US\$3.0 million

OBJECTIVES: To support the Mexican government in developing a regulatory framework that will facilitate private investment in the natural gas subsector, and to institutionally strengthen CRE, the agency in charge of developing and implementing regulatory instruments.

DESCRIPTION: Under this technical cooperation project with MIF funding, four subprograms will be carried out to support CRE in the design and implementation of specific regulations for the gas subsector; design and implement a system of oversight and inspection of compliance with regulations; strengthen the regulatory agency in the energy sector by training staff in their new tasks and responsibilities; and support access to and development of information systems to make regulatory activities more efficient.

IDB AND MIF STRATEGY FOR THE SECTOR: The proposed program is compatible with the Bank's strategy for Mexico, which calls for contributing to the recovery and maintenance of economic growth by promoting private investment in infrastructure. The Bank will support reform programs aimed at modifying the structure of industry in the sector and developing regulatory frameworks that encourage the creation of competitive markets. The Bank's lending program includes an operation to support the development of the natural gas subsector by opening it up to the private sector. The present operation will lay the regulatory foundation for this to occur.

RISKS: The principal risks of the project lie in the CRE's lack of financial autonomy and the federal government's budget constraints, which may place limitations on the proper functioning of the Commission. The regulations implementing the CRE Act currently being drafted, once issued, will effectively make the CRE financially autonomous, with greater freedom to act on budgetary matters.

TERMS AND CONDITIONS: A requirement has been established whereby the CRE is to demonstrate, prior to the first disbursement, that the proceeds of this grant are not substituting for any other funds provided for in the budget approved for the Commission for 1996, and therefore that this funding represents an additional contribution to the performance of the CRE's activities (paragraph 3.2).

MODALITY: The MIF funding for this cooperation project will be disbursed in the form of a grant.

ENVIRONMENTAL CLASSIFICATION: The Environment Committee, at its meeting of February 20, 1996, classified this as a Category II operation.

I. COUNTRY ELIGIBILITY

- 1.1 The Donors Committee declared Mexico eligible for all forms of MIF financing on January 21, 1994.

II. THE PROGRAM

A. Background

- 2.1 The Mexican government has maintained a program of liberalization and continued to pursue efforts to promote competitiveness and efficiency in all its activities. In recent years, deregulation, the promotion of free trade, and the removal of entry barriers have produced considerable gains for the economy. However, reforms in the energy sector to encourage greater efficiency and productivity have only just begun.
- 2.2 In spite of its large natural gas reserves and the fact that it has developed a vast infrastructure of major pipelines, Mexico has not tapped this resource significantly. Up until 1995, PEMEX was solely responsible for activities in the natural gas industry, and its budget constraints placed a cap on the development of the distribution infrastructure needed to develop this industry.
- 2.3 In May of 1995, the legal framework of the natural gas subsector was changed to authorize private investment in the transportation, storage, and distribution of natural gas. This reform opened up to private investment areas that had traditionally been reserved for the State. It also assigned regulatory functions to the Comisión Reguladora de Energía (CRE) [Energy Regulatory Commission], which had been created by executive decree in October of 1993. This was the result of the 1992 amendments to the Ley del Servicio Público de Energía Eléctrica (LSPEE) [Electrical Utilities Act], which permitted private investment in projects to generate electricity.
- 2.4 The CRE began operations in 1994 as a technical advisory agency of the Ministry of Energy, without financial self-sufficiency or management autonomy. Its structure and powers did not match the needs of the new national energy policy. In order to synchronize the development of an institutional framework in line with the modernization of the country's energy sector, the national Congress passed the Ley de la Comisión Reguladora de Energía [Energy Regulatory Commission Act] in October 1995, granting the agency new powers. This law transformed and strengthened the Commission in several ways: (i) it brought within the CRE regulatory instruments that were scattered among several entities; (ii) it defined the CRE as a deconcentrated body of the Ministry of Energy with technical, operational and financial autonomy; (iii) by legislative mandate, it placed the CRE in charge of regulating the activities of public and private operators in electricity and natural gas; (iv) it

granted CRE decision-making authority to enforce the regulations and settle disputes relating to regulated activities; and (v) it granted the CRE the necessary powers to fulfill its objective of promoting the efficient development of the industry.

- 2.5 In November 1995, the Reglamento de Gas Natural (Natural Gas Regulations) were published in the Official Gazette. Based on the aforementioned act, the regulations set forth general principles for the granting of permits and their content, open access to pipelines, separation of services, secondary capacity market, guidelines on prices and rates, and administrative provisions, including sanctions among others.
- 2.6 Reform of the natural gas subsector seeks to clearly separate the functions of the various state agents involved in the operation, ownership, and regulation of energy. The state operator is to be Petróleos Mexicanos (PEMEX) [Mexican Petroleum Company], which is in charge of developing and managing the primary resource. The owner is the Ministry of Energy, which is responsible for designing and implementing national energy policy. The regulatory authority is CRE. The private sector is to own and operate the areas opened up to private participation. This reform will allow PEMEX to concentrate on production, while private initiative provides the resources necessary to develop the transportation, storage and distribution of natural gas.
- 2.7 As a result of these reforms, CRE has begun a process of strengthening and restructuring to enable it to better perform the following core tasks in developing the natural gas industry:
 - a. Design regulations to implement amendments to the legislation governing the natural gas market, authorizing private investment in the transportation, storage and distribution of natural gas.
 - b. Design and implement a system of inspection and supervision of compliance with rules and regulations in the natural gas subsector.
 - c. Provide for a fair market relationship between the State operator and private agents. The market influence of said operator should be regulated to provide a stable environment for private investment. Likewise, it will regulate the private entities when they operate as natural monopolies.
- 2.8 In addition, the Mexican government is currently studying, with support from a technical assistance loan from the World Bank, additional reforms covering the institutional framework of the electricity subsector. Through its authorities, CRE is helping to define a structure to be adopted for the subsector. That structure is also to be geared to separating the roles played by the various state agencies and increasing involvement by the private sector.

As a result of the reforms adopted for the electricity subsector, CRE is to develop the regulatory framework and support the privatization of electricity-generating activities. The technical assistance needs associated with this reform of the electricity subsector, whose scope has yet to be defined, are not covered in this technical cooperation project and will be analyzed by the Bank within the framework of analysis of the Program for Development of the Electrical Sector currently being prepared by the Bank.

B. Objectives of the technical cooperation project

- 2.9 To support the Mexican government in developing a regulatory framework geared to facilitating private investment in the natural gas subsector; and to institutionally strengthen the CRE, the agency in charge of developing and implementing the regulatory instruments. The execution period for this project will be 18 months.

C. Components and activities

- 2.10 This technical cooperation project with MIF resources will serve to develop four subprograms, as summarized below. A more detailed description is found in the technical annexes.
- 2.11 **Subprogram I: Design and implementation of specific regulations for the natural gas subsector.** This activity has been structured in two stages, given the need to implement basic initial regulations as soon as possible in order to put the new model for the subsector into operation. The first stage began with the hiring of consultants to develop the basic regulatory standards needed to implement the CRE Act and the Natural Gas Regulations. For this first stage, the CRE has received budgetary contributions from the federal government through a reallocation of funds from a technical assistance loan from the World Bank for infrastructure privatization.
- 2.12 Activities under the first stage, which began in November 1995 and is expected to be completed by May 1996, have included: (i) definition of the structure of the CRE; (ii) the methodology for setting prices and rates; (iii) initial definition of technical specifications for transmission and distribution systems; (iv) definition of geographic areas for which permits are to be issued; (v) definition of procedures and terms for bidding; (vi) procedures for issuing permits when requested by an interested party; (vii) definition of the title of the permit; (viii) drafting of the regulations to implement the CRE Act; (ix) by-laws of the CRE; and (x) issuance of provisional permits.

- 2.13 The MIF resources would allow for a second stage of design and implementation of specific regulations for the natural gas subsector. A specialized consulting firm would be hired to help the CRE develop:
- 2.14 (i) transportation and distribution codes that would promote efficient use of infrastructure and include measures to prevent unduly discriminatory treatment; these codes will regulate the rights and obligations of the permit holders, including such aspects as the daily balance of the system, metering, handling and allocation of losses, etc.;
- 2.15 (ii) evaluation, discussion and definition of the free access program and organization of the secondary capacity market, including the program that must be prepared by PEMEX to implement free access to the system, and the issuance of directives to publicize the available capacity in order to develop the electronic information system to publicize the available capacity and establish priorities of access and measures to ensure service in case of abandonment; and
- 2.16 (iii) standards for connection to and disconnection from the transportation and distribution networks.
- 2.17 **Subprogram II: Design and implementation of systems of supervision and inspection of compliance with the rules and regulations in the natural gas subsector.** This subprogram will channel resources into the design and implementation of such a system. This implies a high degree of interaction with regulated entities, through user complaint systems and by evaluating compliance with the rules by regulated entities. Also needed are information systems with considerable interaction among these entities, consumer groups, and government agencies. The activities to be carried out with the support of MIF resources would be the following:
- 2.18 (i) development and implementation of an information and monitoring system, and publication of prices and rates for first-hand sales, transportation, and distribution;
- 2.19 (ii) development of procedures for dispute resolution, monitoring and follow-up on complaints and arbitration, including criteria for arbitration in the establishment of easements and crossings;
- 2.20 (iii) installation of legal, administrative and financial information systems to support operations within the CRE.
- 2.21 **Subprogram III: Staff training.** This subprogram's specific objective would be to strengthen the regulatory body of the energy sector, through the following activities geared to training staff in their new tasks and responsibilities:

- 2.22 (i) in-service training of CRE staff, which would be done by hiring consultants or experts on energy regulation to help the CRE staff with day-to-day operations and troubleshooting once the regulations are implemented, as well as transferring knowledge to said staff;
- 2.23 (ii) training through courses and seminars on energy regulation, and the establishment of exchange programs with other regulatory commissions, specialized institutes, agencies, government officials or experts on regulation from the region, in order to learn about other similar experiences and consolidate the process underway in Mexico.
- 2.24 **Subprogram IV: Procurement of computer hardware and software.** This subprogram's specific objective would be to strengthen the regulatory body in the energy sector by providing support for access to hardware and software needed for information systems to streamline regulatory activities. This would include the following activities:
 - 2.25 (i) procurement of computer hardware and software to support the various information systems in the areas under CRE's administrative control, including legal information and regulatory standards, as well as statistical, financial and economic data;
 - 2.26 (ii) procurement of specialized equipment to run technical evaluation and simulation programs of the natural gas transportation and distribution systems;
 - 2.27 (iii) facilitate access to information networks, data banks and specialized bibliographies on the regulation, operation and technical features of natural gas transportation and distribution systems.

D. Cost and financing

- 2.28 The budget for execution of the aforementioned activities is estimated at US\$3 million. MIF would help finance the project through a donation of US\$1.5 million, and the CRE would contribute the remaining US\$1.5 million from its budget. The project budget is presented in Table II-1, and a detail of same is included in Annex II.
- 2.29 The local counterpart would be US\$1.5 million, which is estimated to cover the cost of local professionals and administrative support staff, and other resources needed to carry out the program, whose funding would essentially come from the CRE. These resources are guaranteed with contributions the CRE receives from the federal government. The local contribution represents a considerable effort, considering that the budget approved for 1996 totals N\$40.2 million (US\$5.3 million), compared to a 1995 budget of N\$9.6 million (US\$1.5 million). This budgetary increase will be

used primarily to cover staffing needs and additional expenses incurred by the new functions entailed in regulating the natural gas subsector. However, even this substantial increase would not give the CRE sufficient resources to guarantee the timely and effective development of regulations to promote private involvement in the industry. Accordingly, MIF support is being requested for this technical cooperation project.

TABLE II-1 PROJECT BUDGET (US\$ thousands)		MIF	LOCAL CONTRIB.	TOTAL
Subprogram I: Design and implementation of specific regulations for the natural gas subsector		800.0	616.0	1,416.0
1.	Transportation and distribution codes, free access program, and organization of the secondary capacity market, and connection and disconnection standards	800.0	616.0	1,416.0
Subprogram II: Design and implementation of inspection and supervision systems		247.0	368.0	615.0
1.	Price and rates information system	106.0	147.0	253.0
2.	Dispute resolution and complaints system	55.0	84.0	139.0
3.	Administrative and legal information systems	86.0	137.0	223.0
Subprogram III: Staff training		174.0	241.0	415.0
1.	In-service training	87.0	99.0	186.0
2.	Seminars, exchanges and visits	87.0	142.0	229.0
Subprogram IV: Procurement of computer hardware and software		200.0	150.0	350.0
Contingencies		79.0	125.0	204.0
PROGRAM TOTAL		1,500.0	1,500.0	3,000.0

E. Organization and execution

- 2.30 The executing agency will be the CRE, a deconcentrated agency of the Ministry of Energy with technical and operational autonomy pursuant to the law. The CRE is headed by a board of commissioners acting as its highest decision-making body. The board is made up of five commissioners, including its chair, who are appointed by the chief of the federal executive branch after nomination by the Minister of Energy. The commissioners are appointed for staggered, renewable five-year terms and may only be dismissed for serious grounds. The CRE is organized into five areas: the executive secretariat, three operating areas (natural gas, electricity, and legal affairs), and an economic affairs division. The latter would serve as program coordinator.

F. Disbursements

- 2.31 The technical cooperation funding will be disbursed by the procedures established by the Bank. The disbursement period for the project will be 18 months. Before the first disbursement, the executing agency must demonstrate to the Bank that the proceeds of this grant will not substitute for any other funds included in the budget approved for 1996, and therefore that they represent an additional contribution to the activities of the Commission.

G. Inspection and supervision

- 2.32 The project will be supervised by the Bank's Country Office in Mexico, in close coordination with the Finance and Basic Infrastructure Division of Region 2 and the Office of the MIF.
- 2.33 The project monitoring process will include the preparation of semi-annual progress reports by the executing agency, to ensure proper follow-up on the project. The first report is to show the results obtained in developing the initial basic regulations, as well as progress made on the other subprograms. When the first interim report is submitted, or when the executing agency or the supervisor of the project deems it necessary, there will be flexibility to propose changes in the activities, within the allocated amounts, by changing the allocation of the resources, subject to approval by the MIF office.

H. Environmental considerations

- 2.34 Implementation of this technical cooperation project will have no direct environmental impact. The 1988 General Ecological Balance and Environmental Protection Act (LGEEPA) currently in force establishes the basis for environmental protection in the country and mentions two basic types of policy instruments for environmental management. The first instrument involves using the authority of the State by means of: (i) granting licenses for public or private works based on an environmental impact assessment and risk studies; (ii) land use planning; (iii) the establishment of environmental standards that define ceilings for emissions. The second instrument is environmental and health education.
- 2.35 The task of regulating and protecting the environment is centralized in the recently created Ministry of the Environment, Natural Resources and Fisheries (SEMARNAP). SEMARNAP defines and enforces environmental and natural resources policy in Mexico through two agencies: (i) the National Institute of Ecology (INE), which is responsible for planning, conducting research and issuing rules and regulations on the environment and conservation of protected areas; and (ii) the Federal Environmental Authority, responsible for enforcement, public participation, and environmental education.

- 2.36 The CRE's functions do not relate to environmental eligibility or oversight. Environmental eligibility criteria for investing in the natural gas subsector, including the requirement of environmental impact studies when appropriate, are already in place. Evaluation and oversight of compliance with those criteria is incumbent on the aforementioned agencies.
- 2.37 In addition, the implementation of the natural gas program is expected to bring major benefits, because it would replace consumption of LPG and fuel oil, which currently generate many pollutants. Ecological standards have been approved, and will enter into force in 1998, to encourage the replacement of fuel oil with natural gas in industrial processes, and promote the development of distribution systems.
- 2.38 During the execution of this project, and in its evaluation, it is proposed that the following aspects be monitored and reviewed: (i) coordination of sector standards with national environmental regulations; (ii) institutional installed capacity for adequate environmental management of the sector, particularly for application of environmental eligibility criteria and environmental inspection procedures. The results of the evaluation will make it possible to design future Bank support programs to strengthen the environmental management capacity of Mexico's energy sector.

III. BENEFITS AND RISKS

- 3.1 This technical cooperation project was designed to include the activities required to attain the proposed objectives while ensuring sufficient flexibility for successful project execution. The major benefit of this technical cooperation project would be the development of regulations that effectively promote private investment in the natural gas sector to enable the country to make more efficient use of its energy resources.
- 3.2 The principal risks of the project lie in the CRE's lack of financial autonomy and the federal government's budget constraints, which may place limitations on the proper functioning of the Commission. Operation of the CRE as an agency with autonomous spending authority has been built into the federal budget for 1996. Mechanisms are now being studied whereby the CRE could collect fees from the entities it regulates, which would bolster its financial autonomy. The CRE currently must perform many of its operations through the Ministry of Energy, which diminishes its flexibility. The regulations implementing the CRE Act currently being drafted, once issued, will effectively make the CRE financially autonomous. In addition, the setting of budgetary ceilings by the Ministry of Finance may mean that this grant would not represent resources additional to the approved budget. For that reason, a requirement

has been established whereby the CRE is to demonstrate, prior to the first disbursement, that the proceeds of this grant are not substituting for any other funds provided for in the budget approved for the Commission for 1996, and therefore that this funding represents an additional contribution to the performance of the CRE's activities.

IV. COMPLIANCE WITH ELIGIBILITY CRITERIA

- 4.1 This technical cooperation project - designed to develop and implement regulations for the post-reform natural gas industry, and to strengthen the regulatory agency - will help put in place a framework for private investment in the energy sector. These objectives are fully compatible with the overall objective of the MIF, which seeks to strengthen investment and expand the private sector to provide a footing for accelerating economic growth and social development in Mexico.
- 4.2 The project is also in keeping with the criteria for granting financing under the Technical Cooperation Facility, pursuant to Article III, Sections 2 (c) and (d) of the Agreement Establishing the MIF, which state that grants are to be provided to governments to finance advisory services needed to establish and/or strengthen regulatory agencies and advice on the design and implementation of privatization programs. A strengthened CRE is a prerequisite for private investment.

V. CONSISTENCY WITH THE BANK'S COUNTRY PROGRAM

- 5.1 The proposed program is compatible with the Bank's strategy for Mexico, which calls for recovering and maintaining economic growth, as well as promoting private investment to finance infrastructure. In this connection, the Bank will support reform programs geared to modify the structure of industry in the sector and to shape regulatory frameworks that foster the creation of competitive markets. The Bank's lending program includes an operation to support the development of the natural gas subsector by opening it up to the private sector. The present operation will lay the regulatory foundation for this to occur. Also, in the area of energy, the Bank's lending program includes a loan to finance public investments in transmission and distribution in the electricity subsector.

VI. AVAILABILITY OF MIF RESOURCES

- 6.1 The project will be financed with a grant, based on the following considerations: (a) on January 21, 1994, the Donors Committee declared the country eligible for all forms of MIF financing; (b) section IV of the eligibility memorandum details Mexico's compliance with eligibility criteria for obtaining grants; and (c) the proposed project would have a significant catalyzing effect on investment flows, in keeping with Article III, Section 2 (a), of the MIF Agreement, in that the objective is to set the stage for private-sector participation in delivering natural gas services. The validity of these criteria was confirmed at a meeting of the Donors Committee on March 30, 1994 (MIF/GN-23).

VII. EVALUATION

- 7.1 The progress and results achieved under this technical cooperation project will be evaluated by the project team on the basis of the extent to which its specific objectives have been fulfilled. Annex I shows the anticipated results of each activity. These will serve as a reference for following up adequately on the attainment of the project's objectives as determined by the progress reports and project supervision.

MIF - FACILITY I - MEXICO REGULATORY FRAMEWORK FOR THE NATURAL GAS SUBSECTOR AND STRENGTHENING OF THE CRE		
General objective of the project To develop a regulatory framework geared to facilitate private investment in the natural gas subsector.		
Specific objective of the project Institutional strengthening of the regulatory agency (CRE) and support for developing the regulatory instruments for the natural gas subsector.		
Subprograms	Activities	Expected results
I. Design and implementation of specific regulations	Support the design and implementation of specific regulations for the subsector: (i) definition of initial basic regulatory standards, structure of the CRE, setting of prices and rates, permits, and technical specifications; and (ii) develop transportation and distribution codes, assess and define the free access program and organize the secondary market for capacity, and set standards for connection to and disconnection from transportation and distribution networks.	Issue initial basic standards within four months of program start-up, and have an appropriate regulatory framework for the natural gas subsector in place by the end of the program.
II. Design and implementation of oversight and inspection systems	Support the design and implementation of: (i) information and monitoring systems as well as publishing of prices and rates for first-hand sales, transportation, and distribution; (ii) procedures for dispute resolution, inspection and follow-up on complaints and arbitration; (iii) establish legal, administrative and financial information systems to support the internal operations of the CRE.	Have adequate inspection and oversight systems in place by the end of 1996.
III. Staff training	Staff training activities, including in-service training, conducted through the hiring of consultants or experts in energy regulation, attendance at courses and seminars on energy regulation, and establishing exchanges with Latin American academic institutions or governments.	Have the regulatory agency staffed with efficient, trained individuals by the end of the program.
IV. Procurement of computer hardware and software	Support for the procurement of computer hardware and software in general, as well as specialized equipment to run technical evaluation programs to evaluate and simulate natural gas transportation and distribution systems; design and implementation of information systems for the administrative areas, development of legal information systems and regulatory standards, development and implementation of statistical, financial and economic information systems; and facilitating access to information networks, data banks and specialized bibliographies on the regulation, operation and technical features of natural gas transportation and distribution systems.	Have an autonomous regulatory agency, equipped with the proper tools, by the end of the program.

MEXICO (TC-95-02-23-9) - MIF

**REGULATORY FRAMEWORK FOR THE NATURAL GAS SUBSECTOR
AND STRENGTHENING OF THE CRE**

DETAILS OF THE PROJECT BUDGET	Consultant months	MIF (US\$ thousands)	LOCAL (US\$ thousands)
SUBPROGRAM I: DESIGN AND IMPLEMENTATION OF SPECIFIC REGULATIONS			
1. Develop transportation and distribution codes, including definition of the free access program and organization of the secondary capacity market, standards for connection to and disconnection from transportation and distribution networks, and commercial and operational rules to keep the systems in balance Consulting firm		800.0	616.0
SUBPROGRAM II: DESIGN AND IMPLEMENTATION OF OVERSIGHT AND INSPECTION SYSTEMS			
1. Information system on prices and rates Travel and other expenses	7.5	67.0 39.0	88.0 59.0
2. Dispute resolution, complaints and arbitration Travel and other expenses	5.0	45.0 10.0	49.0 35.0
3. Administrative and legal information systems Travel and other expenses	9.0	76.0 10.0	81.0 56.0
SUBPROGRAM III: STAFF TRAINING			
1. In-service training Travel and other expenses		53.0 34.0	28.0 71.0
2. Short courses, exchanges and visits Travel and other expenses		21.0 66.0	60.0 82.0
SUBPROGRAM IV: PROCUREMENT OF COMPUTER HARDWARE AND SOFTWARE		200.0	150.0
Contingencies		79.0	125.0
PROGRAM TOTAL		1,500.0	1,500.0

PROPOSED RESOLUTION

MEXICO. NONREIMBURSABLE TECHNICAL COOPERATION TO DEVELOP A REGULATORY
FRAMEWORK FOR THE NATURAL GAS SUBSECTOR AND STRENGTHEN THE
COMISION REGULADORA DE ENERGIA (CRE)

The Donors Committee of the Multilateral Investment Fund

RESOLVES:

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Multilateral Investment Fund, to enter into such agreement or agreements as may be necessary with the Estados Unidos Mexicanos, and to adopt such other measures as may be pertinent for the execution of the technical cooperation project described in Document MIF/AT-_____, the objective of which is to develop a regulatory framework for the natural gas subsector and strengthen the Comisión Reguladora de Energía (CRE).

2. That up to the sum of US\$1,500,000, or its equivalent in other currencies, is authorized for the purposes of this resolution, chargeable to the Technical Cooperation Facility of the Multilateral Investment Fund.

3. That the above-mentioned sum is to be provided on a nonreimbursable basis.