

ELECTRIC SECTOR REFORM

(TC-95-09-13)

EXECUTIVE SUMMARY

EXECUTING AGENCY: The GOH will designate a technical group to be the project executing unit (PEU) for the Technical Assistance. The global **Public Enterprises Democratization Law** that has been prepared by the GOH creates a "Council for the democratization of Public Enterprises" and this council will have a technical secretariat, in charge of implementing the law. This law is expected to have rapid approval by Parliament. As soon as it is approved, the PEU will become the Technical Secretariat's unit in charge of coordinating the electric sector reform. In the event this law's approval is delayed, the GOH will promptly designate another technical group to be the PEU. This is a condition prior to the first disbursement.

OBJECTIVES: The main objective of the TC is to assist the Government of Haiti (GOH) in the reorganization of the electricity sector and the establishment of a framework for the provision of electricity in conditions of economic (productive and allocative) efficiency by means of an increased participation of the private sector and its capacity to manage and operate the sector more efficiently, and to bring needed financial resources for its growth and development.

DESCRIPTION: The MIF will assist the GOH to attain the objectives of this operation, providing technical assistance in four areas: 1) institutional strengthening of the executing unit responsible for the implementation of the electricity reform program; 2) Analysis and choice of options for the reorganization of the sector; 3) Preparatory studies for a sector reorganization plan and bidding documents for private participation in the reorganized sector; and 4) The formulation and elaboration of a legal and institutional framework adequate to the chosen option.

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|-------------------|---------------|----------------|
| FINANCING: | Modality: | Grant |
| | Recipient: | US\$ 91,000 |
| | MIF: | US\$ 1,169,000 |
| | Other donors: | US\$ 0 |

Total: US\$ 1,260,000

**IMPLEMENTATION
SCHEDULE:**

Program implementation will begin with the hiring of the long term consultant, in charge of coordination and institutional strengthening (Activity 1). Government of Haiti must choose a viable option for the initial structure and evolution of the sector, at completion of relevant analysis (activity 2), 1 month after initiation. Total duration of TC will be 24 months

**SPECIAL
CONDITIONS:**

Prior to the first disbursement of project funds, the GOH will designate a Project Executing Unit, PEU, to the Bank's satisfaction (paragraph 3.33).

Resources for activities 3, Preparatory studies for a sector reorganization plan and bidding documents for private participation in the reorganized sector and 4, formulation and elaboration of a legal and institutional framework adequate to the chosen option, will only be disbursed when the GOH will have chosen, to the satisfaction of the Bank, a viable option for the initial structure and evolution of the sector, as an outcome of activity 2 and will have officially communicated this option to the Bank. (paragraphs 3.21 and 3.34).

The Bank will approve all candidates and terms of reference for consultants to be financed with program resources (paragraph 3.35).

At the at the request of the GOH, the Long Term Consultant/Program Supervisor will be hired by the Bank (paragraph 3.38).

**ENVIRONMENTAL
CLASSIFICATION:**

The Environmental Management Committee classified this as a Category III operation on December 26, 1995.

I. COUNTRY ELIGIBILITY

- 1.1 The Donors Committee declared Haiti eligible for all modalities of MIF financing on September 11, 1995.

II. BACKGROUND

A. The Electric Sector in Haiti

- 2.1 At present, the public power supply system in Haiti is managed by Electricité d'Haïti (EDH), an autonomous institution of the Government of Haiti under the direct supervision of the Ministry of Public Works, Transportation and Communications, with a national monopoly on the generation, transmission, distribution and commercialization of electric power. Electricité d'Haïti supplies around 132000 costumers.
- 2.2 The public utility main grid covers the Metropolitan Area of Port-au-Prince (PaP), which is served mainly by the Peligre Hydro Plant and the Carrefour and Varreux thermal plants. At present, the thermal plants have an effective capacity of 58 MW. The Hydro Plant has a nominal maximum capacity of 54 MW; it can effectively deliver a maximum capacity of 48 MW and a guaranteed capacity of 10 MW (during the dry season of a dry year). By mid 1996 there will be a net addition to thermal capacity of 27 MW, 18 financed by the World Bank and the Canadian International Development Agency (CIDA), and 9 by the European Union. Total effective thermal capacity will then reach 85 MW. Hence by mid 1996 PaP will dispose of a guaranteed capacity of some 95 MW. The maximum capacity will reach up 133 MW during the rainy season if the year is wet. Available guaranteed capacity will then have gone from some 33 MW at the restoration of democracy in October 1994 to 95 MW in mid 1996. This has been accomplished thanks to the programs of the different bilateral and multilateral donors, which resulted in great part of the efforts that the Bank's team invested during November 1994 (PURE and EERP programs), in convincing such donors of the necessity of repairing the existing generation stock as the most efficient and cost effective means of reestablishing service.
- 2.3 Peak demand in PaP was determined by an Electricité de France Hydro-Quebec (EDF-HQI) Technical Assistance team to reach 84 MW at the end of 1994, but during the rainy season of 1995, when there were few black outs it seems to have attained 100 MW, since the improvement in supply has apparently caused pent up demand to be revealed. Energy consumption in PaP can be estimated to have reached 194 Gwh in the second semester of 1995. Billed Energy reached 133 GWh and Generation reached 273 GWh in the same period. Hence, total electrical losses reached 51.3%. It seems that when generation increased as a consequence of increased capacity, the increase in consumption was reflected in greater non-technical losses.
- 2.4 The PaP system will continue to have black-outs in the dry months and general poor reliability for a while. In order to alleviate

black outs, provide needed Reserve Capacity and increase reliability, it will be necessary to install some 3 additional 10 MW Diesel Units by 1997, and one of those units each year thereafter, except 1999. In 2001 there will be need for a peaking unit (10 MW Gas turbine). Only after 2005 will there be need for interconnection of the system. 1/

- 2.5 Generation in the provinces for the last six months of 1995 amounted to 28 GWh. This was well below demand. Capacity was also well below peak loads. The situation has improved lately in the Cap Haitien area, the second in the country, since an IPP (Independent Power Producer) started generating recently there. However given that EdH barely recovers its operating costs with its revenues, delivery of energy by this IPP may soon run into difficulties as there is a very high risk of default on payment on the part of EdH.

B. Technical Assistance in the emergency period.

- 2.6 Since July 1995 EDF-HQI has provided Technical Assistance to EDH, financed by the Caisse Francaise de Cooperation (CFD) and CIDA. This TA team has been responsible for the implementation of the generation rehabilitation works mentioned above. It has also provided assistance in all other areas of operation and management of EDH. Its work has been crucial in restoring the thermal capacity, repairing the distribution and transmission networks, and improving commercialization, billing, accounting and financial management. However the scope of its mandate is limited by lack of autonomy in its operation and cannot continue indefinitely. It should end when new reorganized structures for the sector are implemented as the outcome of the MIF/TA operation proposed herein. However, it would be of crucial importance that its work be continued while the reorganization plan for the company is being prepared and up to the moment it will be implemented. The CFD is willing to continue funding this TA if there is a clear plan of action of the GOH to implement a viable sectoral reform. IDB backs this intention. The TA team has been able to use in its work the funds provided by the different bilateral donors, by IDB's PURE program and by the WB.

C. Sector problems and the need for reform

- 2.7 The Haitian electric sector has shown an accelerating downward trend at least for 2 decades. One indicator, total electrical losses illustrates this descent. In 1980 total electrical losses were already quite high (27%) by international standards; they had grown to 29% by 1985, to 40% by 1989, to 43,5% by 1993 and are estimated at present to be approximately 50% (as of Dec. 1995;

1/These are preliminary figures based on the latest expansion plan study done recently by an EDF-HQI Technical Assistance team.

they reached a peak of 63.7% in september 1995). Billing and collection were very deficient, until mid 1995; less than 50% of billings were recovered, implying that less than 25 cents were then recovered of each dollar equivalent of energy produced. Since mid 1995, the billing situation has started to improve, as a result of the Technical Cooperation EdH is receiving from EDF and Hydro-Quebec. Total electrical losses are equally starting to show improvement for the same reason.

- 2.8 On the financial side, EdH has presented net operating losses since 1989. They have been as high as US\$ 8 Million. At present they are of the order of US\$ 3.5 to US\$ 4.0 million (data for 1994 and 1995). They constitute a heavy burden for the already weakened fiscal resources of the country ^{2/}. Indeed, EDH's revenues barely cover maintenance and operation costs of its Thermal Plants, constituted mostly by fuel costs.
- 2.9 There are numerous other technical and managerial problems at all levels. Among these, on the technical side are: insufficient supply capacity; non-reliable service with frequent and prolonged interruptions; sub-standard quality of electricity with voltage and frequency variations; inadequate or non-existent maintenance of equipment. On the managerial side: lack of autonomy in the steering and operation of the company; inadequate overall direction; difficulties in the observance of the institutional organization arrangements; poor long-term planning; inadequate and deficient operation and maintenance practices; poor commercial and financial management; lengthy administrative procedures; very inadequate information system.
- 2.10 This critical situation is rooted in EdH's institutional arrangements, which have brought the company to the point where it is neither economically nor technically viable. This results in the inability to maintain generation capacity, the incapacity to keep electrical losses at reasonable levels, especially in the areas of distribution and commercialization and, hence, in the incapacity to generate reinvestable operational surpluses and attend to the growth of demand. At present then, it is not possible to create conditions of efficient and reliable operation, satisfactory to all stakeholders: the government and owner, the consumers, the workers and the management. This situation is related to the lack of negative consequences for deficient performance: the State always bails the company out. There is in the present system no market discipline, nor any other form of sanction for bad performance. The bail-out by the State has a heavy price in the form of interference in the management and day to day operation of the company, and imposition of tasks that are better handled by other public agents.

^{2/} This figure represents approximately 9 % of the overall deficit of the non-financial public sector in 1993 and 3% of its current revenues.

- 2.11 This evidence makes the present situation unsustainable, and calls for a comprehensive reform of the sector, with the aim of promoting the provision of electricity in a more efficient way, by means of private initiative participation in that provision, within a restructured sector, working under an adequate legal and institutional framework.
- 2.12 The GOH, with assistance from the International Financial Corporation (IFC), started last year to examine the process of private sector participation. The MIF's technical assistance is formulated to continue, widen and deepen the effort started by the GOH, in the understanding that the ultimate common goal is to ensure the provision of electric services in the most efficient way.

III. PROJECT DESCRIPTION

A. Objective

- 3.1 The main objective of the TC is to assist the GOH in the reorganization of the electricity sector and the establishment of a framework for the provision of electricity in conditions of economic (productive and allocative) efficiency, by means of an increased participation of the private sector and its capacity to manage and operate the sector more efficiently, and to bring needed financial resources for its growth and development.
- 3.2 Specific objectives are: a) Improve the quality and reliability of the electric service. b) Establish a sector working according to commercial practices, free of short-term distortionary political interference (hence, the need to increase the participation of the Private Sector in the provision of electricity). c) Free the State of the endemic financial burden caused by the sector in its present institutional arrangements. d) Provide for the expansion of the electric system by means of private finance. e) Protection of consumers and of the environment.

B. The Elements of Reform in the Haitian context.

- 3.3 So far the reorganization of the Haitian market has been the subject of an extensive study by IFC ^{3/}. In it IFC analyzed several structures for the sector and concluded that "on balance, a vertically disaggregated structure may offer a better prospect for long term development of the industry, however, economies of scale, practical constraints and investor preferences may dictate a partially disaggregated or integrated structure". IFC's preferred option would be to vertically separate generation, transmission and distribution, and horizontally disaggregate generation and distribution. Under this scenario, there would most likely be one

^{3/} IFC, **Options and strategic review for the electricity sector**, June 1995.

transmission company; one hydro-generation company (the Pelligre plant); and two vertically disaggregated utilities, with private sector ownership, in the generation and distribution businesses. Under this structure ownership would be in the form of private companies with indefinite franchises (or licenses) to operate in the sector. The reorganization would be done by launching strategic sales to private purchasers. A complete regulatory and legal framework would accompany this model and would have to be in place before the sales.

- 3.4 In a big enough market (more than 1500 MW installed capacity) this model of structure and ownership would be an effective way of organizing the system and would result in competition and in allocative efficiency. However, this is not necessarily the case for the very small Haitian system 4/, for two reasons: 1) the benefits of economies of scale and scope are still substantial in systems the size of Haiti's, and would most likely outweigh the allocative efficiency cost of a regulated monopoly; and 2) empirical and theoretical analyses have shown that in order to establish an effective competitive environment in generation at least five companies of not too dissimilar market power are needed 5/. In the case of Haiti these companies would be too small and would present diseconomies of scale, scope and coordination.
- 3.5 The diseconomies of scale and scope resulting from the separation of the small Haitian system, are most likely greater than the allocative efficiency costs incurred by an integrated monopoly charging profit maximizing prices. Additionally the profits of the integrated company would be controlled with an appropriate form of regulation, reducing these profits below the monopoly level. This regulation must be kept as simple and as automatic as possible given the weakness and lack of means of the Haitian State.
- 3.6 One way of obtaining this automatic and simple regulation is to include most of the regulatory precepts in a contract between the state and the company delivering the service. This can be done with a concession or a lease contract with a qualified operator (the lease is also known by the french term "affermage"). A vertically

4/ The system will continue to be small for many years to come, even under optimistic hypotheses of demand growth. According to the latest available update to the expansion plan, made by IDB in 1993, the system would have a maximum power demand of 240 (210 in PAP) MW in 2005 under a basic scenario and 250 MW (220 in PaP) under a high scenario. This latter implies a rate of growth of 7.2 % per year, that is the system reaching 100 MW in year 2025 and 1500 MW in year 2030. 1000 MW is widely accepted as the minimum size required to establish some form of disaggregated competitive market, and even this size may be too optimistic. 1500 MW would be a more adequate size as it can accommodate 5 private thermal generators at optimal production scales.

5/ See for example Green and Newbury, "Competition in the British Electricity Spot Market" *Journal of Political Economy*, 1992, pp.929-953, and the work of Gilbert and Riordan, quoted in Kahn E., *Competition issues in the Electricity Sector*, Lawrence Berkeley Laboratory, April, 1994, pages 6-7 and 12. See also Robert Bacon's note on the matter of separation vs. integration of small systems (*Restructuring the Power Sector, the Case of Small Systems*, World Bank, FPD Note No. 10, June 1994), as well as his other working papers on this subject, which elaborate on the subject of weighing costs and benefits of structural change.

integrated concession or an affermage can be regulated quite expediently in the contract, whereas a fully divided market needs a more complex regulatory set-up 6/. For a small system, hence, these forms of organization and regulation are a more adequate way of obtaining the productive and managerial efficiency that the Haitian system lacks in its present situation.

- 3.7 There is one additional reason to organize a small system in the form suggested here, at least until it reaches its critical mass. This structure allows in the long term to restructure the sector along competitive lines, once it grows to a size that warrants such action (30 or more years), whereas establishing a franchised private company (or companies) by strategic sale now could complicate adequate restructuring via future vertical and horizontal separation 7/. In consequence, a concession or leasing contract can and should be seen as a first step in a dynamic process of introducing efficiency in the system that will allow to move later, at the adequate moment, towards a structure of competition in the market for generation.
- 3.8 Lately, the GOH has also been studying the possibility of introducing private sector participation in the way it has been done in Bolivia, now known by the term "capitalization". The idea is to create 50%-public-50%-private mixed ownership enterprises. The Haitian state would contribute the tangible and intangible assets of the public enterprise as part of the subscribed capital of the new mixed society. The private sector partner would subscribe capital equivalent to the value of such assets 8/. Capital would hence be increased. Although the partnership would be 50% public 50% private, the private partner(s) would have the control of the operation and management of the enterprise. The private partner(s) would be selected by means of International competitive bidding (ICB). The private contribution would be used to upgrade and expand facilities and services. Different sectors of society, such as workers and municipalities would be made the eventual beneficiaries of the government share in the profits 9/.
- 3.9 Capitalization is an important means to harness the financial capacity and the managerial and operational efficiency of the private sector in public enterprises, and of allowing the resulting accrued benefits to reach the whole of the population in the

6/ This is, in turn, one more factor in favor of a more integrated structure for the sector, since for a while the Haitian state will not have the capacity nor the resources to set up a complex regulatory system.

7/ This is related to what Green and Newberry call the "option value" of public ownership. If, say, three generation companies are created with indefinite franchises, further sub-division of the market will most likely meet their resistance.

8/ This value would be determined by the market, via international competitive bidding for 50% of the shares of the company.

9/ This differs from the Bolivian, model where the government shares are to be transferred to newly created pension funds, to benefit all Bolivians. Hence they will contribute to the creation of an internal capital market, which is an excellent idea.

country. Capitalization could be immediately implemented in profitable sectors, such as telecommunications (even if they have management deficiencies and productive inefficiencies).

- 3.10 However, with companies which are at present not profitable and that need several years of good autonomous management to bring them afloat-- such as EDH-- the application of the capitalization idea will need a gradual approach in several phases. This is because the private sector could give a very low or even negative value to the company, based on expected future returns. 10/ Hence there will not be a significant positive private contribution to capitalization.
- 3.11 Under those circumstances a gradual approach would have to be employed. This approach could be done, in two phases, as follows. In the first phase the capacity of the private sector to strengthen the company, managing and operating it autonomously and subject to the discipline of the market would be harnessed, via a leasing (affermage) contract. Alternatively, the first phase could be a classic concession.
- 3.12 In the second phase, when the company will have become profitable and strong, and will have a high prospective value in the market, it can be offered for capitalization by means of a concession contract 11/.
- 3.13 Again here the process of transformation of the electric sector can be seen as a progression which starts with an integrated sector working as a classic concession or as an affermage, and as it becomes larger and stronger it evolves into a concession with capitalization and finally into a fully blown disaggregated sector with "capitalized" mixed enterprises and full competition in the market for generation. Indeed some forms of competition could be introduced gradually within the main path described. For example, in the leasing case, increased generation could be done with ICB for Independent Power Producers (IPPs). The lessee could also be given increasing levels of responsibility in investment by phasing in the contract a gradual participation in the investment. The concession contract could be designed to allow for free entry into distribution in areas where coverage has not been completed by a given date.
- 3.14 To sum up, it seems that the main options open at present to the GOH to introduce a viable reform of the electrical sector towards

10/The discount rate reflecting the effect of risk on investment return will be high and the cash flow will be negative during a long initial period of operation, spanning several years.

11/This assumes that the electricity market will still be of a size that does not yet allow for an optimal, more competitive, arrangement via disaggregation. Otherwise the company could be disaggregated and direct capitalization of the resulting companies could be offered. If the sector is small, then a concession would permit capitalization, since the leasing contract is incompatible with it. A concession would offer the advantages mentioned in the text for the organization of a small market.

grater efficiency can be based on the following elements: i) keep the electricity company integrated till the sector will have grown sufficiently; ii) do a gradual transformation towards competitive forms of operation of the electric market and create a legal framework that allows for this; iii) initially introduce the private sector via an affermage or, if further analysis warrants it, via a concession contract; iv) if desired, introduce "capitalization" after a first phase of strengthening of the company via an affermage or a lease contract; v) when the market will have reached critical mass, disaggregate, introduce competition in the market for generation, introduce full regulatory functions and institutions. vi) explore possibility of gradually introducing some forms of competition since earlier in the process, such as competition for the generation market via IPPs.

- 3.15 These elements will have to be pondered in detail by a consulting firm which will do the preparatory studies for a sector reorganization plan and produce bidding documents for private participation in the reorganized sector (see activity 3 below). The long term consultant for institutional strengthening described in activity 1 below will produce TORs for the work of that firm. He will also advise and accompany the GOH in the initial phase of the process of presenting the options and identifying the problems within the framework sketched in paragraph 3.14 ; and will advise the GOH on the choice of a viable option for the initial structure and evolution of the sector within that framework.

C. Activities

- 3.16 The MIF will assist the GOH to attain the objectives of this operation, providing technical assistance in four areas: 1) institutional strengthening of the executing unit responsible for the implementation of the electricity reform program; 2) Analysis and choice of options for the reorganization of the sector; 3) Preparatory studies for a sector reorganization plan and bidding documents for private participation in the reorganized sector; and 4) The formulation and elaboration of a legal and institutional framework adequate to the chosen option.
- 3.17 The disbursement of resources for activities 3 and 4 will be conditioned to the GOH having chosen to the satisfaction of the Bank, at the end of activity 2, a viable option for the reorganisation of the sector.
1. Activity 1. Institutional strengthening of the executing unit responsible for the implementation of the electricity reform program

3.18 The Bank will hire, as Program Supervisor, a long term consultant, with practical experience in private sector participation in the provision of electricity, to support the GOH, and in particular the executing unit responsible for the implementation of the reform program, in all activities related to the reorganization of the sector, and in the technical supervision of the operation. The Program Supervisor will work in close contact with a local project coordinator in the executing unit. He will assist the Government in the execution of the project by providing overall support for the preparation of final terms of reference for all consultants and consulting firms; the identification and selection of consultants; the preparation of monitoring reports; the supervision of consultant assignments; the preparation of the action plan and technical supervision of the program. He will coordinate all other consultants on all project activities described in what follows. He will also assure that the operation works in such a way as to result in a transfer of all relevant know-how to the GOH. Additionally he will be in charge of executing activity 2 below.

2. Activity 2. Analysis and choice of options for the reorganization of the sector.

3.19 The Program Supervisor will also carry out this activity, which aims to assist the GOH in identifying issues and options for the reorganization of the sector, analyzing them and choosing a viable option for the initial structure and evolution of the sector, that will take account of GOH's global strategy of private participation in government owned enterprises, within the framework sketched in paragraph 3.14. and 3.13

3.20 This activity will be executed during the first weeks of the operation and should be completed very fast, as most of the information and analysis necessary to make a decision is already available.

3.21 At the end of this activity the GOH should have chosen, to the satisfaction of the Bank, a viable option for the reorganization of the sector, and officially communicated this option to the Bank. This is a condition prior to the disbursement of any additional resources for the program, in particular those needed to carry out activities 3 and 4.

3. Activity 3. Preparatory studies for a sector reorganization plan and bidding documents for private participation in the reorganized sector.

3.22 MIF resources will be used to finance a consulting firm and individual consultants to do the preparatory studies for a sector reorganization plan and produce bidding documents for private participation in the reorganized sector. They will be coordinated

by the long term consultant and follow Terms of Reference (TORs) prepared by the him. Preliminary TORs have been prepared by the Project Team. As mentioned, the MIF will finance this activity (as well as activity No. 4 below), on the condition that the GOH will have chosen an option for private sector participation, and officially communicated this option to the Bank.

- 3.23 The sector reorganization plan will present the sequencing of reorganization actions; the time-table; the necessary preliminary actions. It will include a path of evolution of the sector based, for example, on the path sketched in paragraph 3.14.
- 3.24 The consulting firm must also prepare the bidding documents for private participation in the reorganized sector, in the initial phase, which may be either a concession or an affermage. This will include the preparation of the model of concession or lease contract.
- 3.25 The Preparatory studies are needed for implementation of the sector reorganization and to write the Bidding Documents. Among these are: Review of present situation of EDH, financial audit of EDH, asset valuation, cross debts, financial projections. Electric sector expansion plan, tariffs, subsidies. Rights and obligations of concessionaire/lessee and of GOH, concession and affermage rules and regulations, legal issues. Personnel relocation and retraining. Environmental audit, environmental management plan. Supply of Energy to rural areas and hamlets.
- 3.26 Most of these studies must be done by the Consulting Firm, some could be carried out by short term consultants, coordinated by the long term consultant and following TORS prepared by the GOH in collaboration with him and with the Consulting Firm preparing the reorganization plan and the bidding documents. These studies will indicate also whether it is possible or advisable to go with a concession contract since the first phase of reorganization of the sector, or if it may be more adequate to start with a leasing.
- 3.27 The study of the best way to provide electricity, and more generally efficient energy, to rural areas and hamlets, presently without service, is of great interest for Haiti, and has important social implications. One alternative for this is to provide coverage by means of electricity cooperatives. Another one would of course be to require the concessionaire or lessee who will take over EDH to increase service coverage in these areas. A third is like the previous one but will allow others to enter these and other areas that will not be covered by the concessionaire/lessee after a certain period, for example 5 years. All these issues and others should be examined in the study which should propose a program for this sector. Because of the special expertise needed for this study, it will be better for specialized consultants to carry it out under the coordination of the Program Supervisor.

4. Activity 4. Technical assistance for the formulation and elaboration of a legal and institutional framework adequate to the chosen option.

3.28 The MIF will finance the technical assistance needed for the formulation and elaboration of this overall legal framework. As the sector will most likely operate in the first phase with a model of concession or affermage for an integrated company, most of the regulatory dictates would be integrated within the contract, including pricing and quality of service. In consequence, a great deal of attention would have to be given to this contract. However, as in the long term it may be advisable to introduce other structures in the market that will allow, for example, for more direct competition, as explained above, it is important to create a legal framework that allows for concessions and leaseings, but flexible enough that it will also allow for an evolution towards those more competitive forms of market organization. Additionally, there are certain functions, such as sector policy, planning and supervision, that will stay in the hand of the government and for which it will be necessary to formalize the legal framework. Furthermore, as initially the sector will be an integrated monopoly it may be convenient to explore forms of eventually regulating it that are outside the concession contract, in areas such as pricing. This is all the more important if the idea is to allow for example for expansion of the generation via competition for the market by IPPs. The provision of electricity to rural areas and hamlets would also require independent regulation and hence a regulatory body with streamlined functions.

3.29 The main activities to consider would be as follows:

4.A Legal Framework

4.A.1. Analysis of the present legal framework for the sector and strategy for the transition to a new framework.

4.A.2. Analysis and formulation of the elements to be introduced in the new legal framework to make it compatible with for the first phase of reorganization, that is with concessions or leasing models.

4.A.3. Analysis and formulation of other elements in the legal framework that will allow for the evolution of the sector towards more competitive forms of market organization or will employ competition elements that can be introduced since the first phase of reform.

4.A.4. Institutional aspects of the legal framework. The study, definition and organization of the relevant policy, planning, regulatory and supervisory functions and institutions (energy planning, elaboration of indicative expansion plans, appropriate regulatory body and regulatory systems, quality and safety

standards board, etc.). Formulation of statutes for the regulatory and supervisory bodies and schedule to phase them in; standards and norms of service; dispatch functions rules and organization, if applicable.

4.A.5. Preparation of required laws and statutes.

4.B. Studies. Study to determine tariff structures conducive to economic efficiency, and ways of introducing them in the different phases of evolution of the sector. Formulation of detailed organization and procedures for institutions. Determination of training needs. Environmental aspects.

3.30 4.C. Training. As part of the training for activity 4, the MIF will also provide resources to finance the travel to Haiti of experts with hands-on experience in regulation, to train the staff of the regulatory agency and other relevant government agencies.

3.31 All work related to the formulation of the legal framework and to the preparation of the law and statutes could be carried out by a consulting firm coordinated closely coordinated by the long term consultant. This firm should also coordinate very closely with the firm preparing the studies and bidding documents for private participation. Indeed, because of synergies it may be a good idea to hire the same firm for both tasks. This should be determined in consultation with the long term consultant. The more detailed studies which do not affect the main content of the laws, such as those described under 4.B. could be carried out by short term consultants closely coordinated by the long term consultant.

D. Cost and Financing

3.32 The Technical Assistance is estimated to have a total cost of US\$ 1.26 Million. MIF finance would amount to US\$ 1.169 Million of that total. Locally financed costs would amount to US\$ 91 thousand. The budget is presented in the table below. The program will be financed on a non-reimbursable basis from the Window I facility of the Multilateral Investment Fund (MIF).

| BUDGET--PRIVATE PARTICIPATION AND LEGAL REFORM OF THE ELECTRIC SECTOR IN HAITI | PERSONS- MONTHS | DONOR FINANCED CST(\$000) | LOCALLY FINANCED CST(\$000) | TOTAL COST (\$000) |
|--|--------------------|---------------------------------|-----------------------------------|--------------------------|
| 1. Institut. strengthening of unit in charge of electric reform | | | | |
| Long term consultant (Program Supervisor). Compensation. | 24 | 240 | | 240 |
| Appointment and Repatriation | | 40 | | 40 |
| 2. Analysis and choice of options for the reorganization of the sector. | 3 | 27 | 3 | 30 |
| 3. Preparatory studies for a sector reorganization plan and bidding documents for private participation in the reorganized sector | | | | |
| Consulting firm. | | 231 | 26 | 257 |
| 4. Formulation and elaboration of a legal and institutional framework adequate to the chosen option | | | | |
| 4. A. Legal and institutional framework. Consulting Firm. | 21 | 227 | 25 | 252 |
| 4. B. Studies. Honoraria | 19.5 | 176 | 25 | 200 |
| 4.B. Studies. Associated Travel and other | | 45 | | 45 |
| 4.C. Training by Regulatory Experts. Associated Travel and other | | 21 | 2 | 23 |
| 5. Environmental Audit and an Env. Management Plan. | | 54 | | 54 |
| 6. Contingencies | | 108 | 10 | 118 |
| TOTAL COST | | 1169 | 91 | 1260 |

E. Special Conditions for Disbursement

- 3.33 Prior to the first disbursement of project funds, the GOH will designate a Project Executing Unit, PEU, to the Bank's satisfaction.
- 3.34 Prior to the disbursement of any resources needed to carry out activities 3 and 4, the GOH will present to the Bank an official communication indicating that it has chosen a viable option for the initial structure and evolution of the sector, which takes account of its global strategy of private participation in government owned enterprises. This option will have been previously discussed with the Bank to its entire satisfaction.
- 3.35 The Bank will approve all candidates and terms of reference for consultants to be financed with program resources.

F. Organization and execution

1. Executing Agency

- 3.36 The GOH will designate a technical group to be the project executing unit (PEU) for the Technical Assistance. The global **Public Enterprises Democratization Law** that has been prepared by the GOH creates a "Council for the democratization of Public Enterprises" and this council will have a technical secretariat, in charge of implementing the law. This law is expected to have rapid approval by Parliament. As soon as it is approved, the PEU will become the Technical Secretariat's unit in charge of coordinating the electric sector reform. As there is a risk that this law's approval is delayed, in such event the GOH will promptly designate another technical group to be the PEU. This will be a condition prior to the first disbursement. The operation will not proceed without a clear entity having been designated by the GOH as PEU. The PEU will have a Local Project Coordinator responsible for the operational coordination of the program and its liaison with relevant Haitian entities, who will work closely with the Long Term Consultant/Program Supervisor, hired by the Bank (see Activity 1).
- 3.37 The Program Supervisor, will assist the Government in the execution of the project by providing overall support for the operation, in matters such as the preparation of final terms of reference for all consultants and consulting firms; the identification and selection of consultants and consulting firms; the supervision of consultant assignments; the coordination of technical work of all other consultants on all project activities (in general, the technical supervision of the operation); and transfer of all relevant know-how to the GOH.
- 3.38 The Program Supervisor will be hired by the Bank, at the request of the GOH. This is a necessary action in the present context of the operation, since he will be more effective, hired this way, in guiding a very complex reform process, involving a broad range of issues, actors and institutions. His independence will provide an additional measure of stability. The likelihood of getting a highly qualified international expert will also be increased if the expert is hired by an international organization. In letter signed July 17 1996, the GOH has expressed its conformity with this procedure.
- 3.39 Together with the Program Supervisor the Local Project Coordinator will coordinate the hiring of all advisors, consultants, specialists, services and studies needed. They will also coordinate a task force made of highly competent technical staff in the GOH administration, connected with areas affected by the reform, like the Ministries of Finance, Planning, Industry and Commerce, and Public Works, as well as EdH. This task force will comment the work in progress, will give advice and support to the

technical unit as needed and will provide permanent feed back on the progress of the operation.

- 3.40 The executing agency, assisted by the Program Supervisor, will produce detailed terms of reference for the activities to be carried out. It will submit them to the Bank, for approval, prior to contracting the services of firms or individuals with program resources.

2. Procurement of Goods and Services

- 3.41 Goods and services will be acquired according to Bank procurement procedures, respecting the specific procurement procedures of the MIF. All goods and services, including consultants and consulting firms to be contracted with MIF resources, shall be nationals of the member countries of the MIF or of developing countries members of the Bank.

3. Execution Period.

The Execution period for the project will be two years. Most activities will be completed during the first year. Only those having to do with institutional strengthening will be prolonged for a second year, to allow for an adequate period to achieve transfer of know-how.

G. Reporting and Monitoring

- 3.42 The proposed assistance will be monitored through in-country reviews based on actions and benchmarks, as well as progress reports ^{12/}. The executive Agency in collaboration with the long term consultant (Program Supervisor) will present to the Bank quarterly progress reports to be prepared and submitted within 30 days of the close of each three month period. These reports are to include: 1) A summary of the activities carried out during the three 3 month period just ended; ii) information on the extent of accomplishment of the project's objectives; iv) information on any difficulties encountered in executing the project and measures taken to resolve them; iv) and a plan of action for the ensuing three month period. In addition, the consultant's reports and preliminary and final reports on specific studies are to be delivered to the Bank, for revision and approval, at the time of completion of each.
- 3.43 There should be enough flexibility built into the program to propose modifications "en route" to activities and resource allocation, as a result of recommendations stemming out of monitoring of work in progress and to allow for coordination with the ISL operation the Bank is about to implement in Haiti. The

^{12/} A set of benchmarks is presented in the technical archive as Annex 3.

project team, in conjunction with the staff of the MIF will approve such modifications.

- 3.44 The operation will be supervised by the Team Leader with assistance from the Bank's Country Office. Technical responsibility will rest with FI2.

H. Environmental Considerations.

- 3.45 The Environmental Management Committee classified this as a Category III operation, on December 26, 1995. The Environmental Brief proposed that the Project team should carry out the necessary work during TC implementation to ensure: a) That an Environmental Audit is carried out, according to Terms of Reference acceptable to the Bank, to determine the environmental status of the electric power sector in Haiti. The Audit should determine the existing environmental liabilities of all power generation and transformation facilities, as well as the state of compliance with the environmental regulations; b) that an Environmental Management Plan is prepared to address all problems identified in the environmental audit. The environmental management plan should also address the eventual need of improvement in the country's legal/institutional environmental regulatory framework in order to support the privatization policy; and c) that there be adequate coordination of the energy sector regulatory and supervisory institutions with the institutions more directly in charge of the environment. As per instructions of the CMA (Comité de Medio Ambiente), terms of reference for the Environmental Audit and Environmental Plan have been prepared 13/.

IV. BENEFITS AND RISKS

- 4.1 Successful completion of the project and its further implementation would result in: a) increased productive efficiency of the electric service; b) improvement of the financial and managerial situation of the electricity sector companies and reduction of electrical losses; c) pricing reflecting efficiency of cost of service and concomitant allocative efficiency benefits; d) generation of an investable surplus for sector growth; e) improvement of government finances as GOH would not longer need to subsidize a losing enterprise and would be able to collect taxes on the system; f) improvement of the general investment climate for other industries, as reliability of electrical supply increases.
- 4.2 Aside from the risks present in the current political situation of Haiti, there is one main element of risk: the obstacles or delays that can appear to the passage of the necessary laws. These delays may not be critical, as long as they do not affect the studies and

13/ These TORS are presented, in lieu of the Environmental Report, as Annex 4 of the technical archive

other actions which will have to be undertaken to create the legal framework (In this sense, care has been taken to avoid that delays in the passage of the global privatization law will result in delays to constitute the PEU, by conditioning the first disbursement to the designation of the PEU). Only if the delays go beyond the point where all the preparatory work has been completed, will they become an obstacle to the sector reform. The Bank will use all means at its disposal, such as conditionalities of other operations, as well as assistance to the Executing Unit in promoting its work, in order to avoid this outcome.

V. COMPLIANCE WITH PROJECT ELIGIBILITY CRITERIA

- 5.1 General Eligibility Criteria - The project to be financed by the MIF is fully consistent with the general purpose of the MIF which is to increase private investment and expand private sector activity.
- 5.2 Facility Criteria for Project Eligibility - The project is compatible with the criteria for grant financing under the Technical Cooperation Facility, Article III, Section 2 of the MIF Agreement which establishes, that under the Technical Cooperation Facility, grants shall be provided for technical cooperation, as appropriate, to governments to finance the development of national country plans for comprehensive reform of the policy and legal environment for investment, in conjunction with, and complementary to, Bank country programs, and advisory services to implement these plans, which may involve advice on reforming investment laws, as well as advice on implementing those laws, and regulatory agencies.

VI. CONSISTENCY WITH THE BANK'S COUNTRY PROGRAM

- 6.1 The project is fully consistent with the Bank's strategy of supporting the reorganization of the Haitian economy and the development of its private sector.

VII. AVAILABILITY OF MIF RESOURCES

- 7.1 **Funding Modality.** The project is expected to be financed through a grant based on the following points: i) Haiti was declared eligible for all modalities of financing under the MIF by the Donors Committee on August, 1995; ii) the compliance of Haiti with the criteria of eligibility for obtaining grant resources at the country level (Article 3, Section 5b of the MIF Agreement) is detailed in section III paragraphs 3.1, 3.2 and 3.3 of the

Eligibility Memorandum of the country (MIF/GN 8); and iii) the proposed project will have an important catalytic impact as required by Article 3 Section 5 (a) of the MIF Agreement.

Approved by: _____
RE_/DEP

Date: _____

MIF HAITI
PRIVATE PARTICIPATION AND LEGAL-REGULATORY
REFORM OF THE ELECTRIC SECTOR

PROJECT GENERAL OBJECTIVE

To assist the Government of Haiti (GOH) in the reorganization of the electricity sector and the establishment of a framework for the provision of electricity in conditions of economic (productive and allocative) efficiency, by means of an increased participation of the private sector and its capacity to manage and operate the sector more efficiently, and to bring needed financial resources for its growth and development.

PROJECT SPECIFIC OBJECTIVES

a) Improve the quality and reliability of the electric service. b) Establish a sector working according to commercial practices, free of short-term distortionary political interference, and increase Private Sector participation c) Free the State of the endemic financial burden caused by the sector in its present institutional arrangements. d) Provide for the expansion of the electric system by means of private finance. e) Protection of consumers and of the environment.

| Components | Activities | Expected results |
|---|---|---|
| 1) Institutional strengthening | Long term consultant acting as Program Supervisor, will provide overall support for the operation in matters such as the preparation of final terms of reference for all consultants; the identification and selection of consultants; the supervision of consultant assignments; the coordination of technical work of all other consultants on all project activities; transfer of all relevant know-how to the GOH; and assist the GOH in identifying issues and options for the reorganization of the sector. | The consultant has achieved complete transfer of know-how to Haitian counterparts, at the end of its contract (month 24). |
| 2) <u>Analysis and choice of options for the reorganization of the sector.</u> | A. Program Supervisor assists the GOH in identifying issues and options for the reorganization of the sector, analyzing them and choosing a viable option for the initial structure and evolution of the sector. | A viable option for the initial structure and evolution of the sector has been chosen by the GOH by month 1. |
| 3) Preparatory studies for a sector reorganization plan and bidding documents for private participation in the reorganized sector. | A. Sector reorganization plan | Plan ready by month 5 |
| | B. prepare bidding documents for private participation in the reorganized sector | Bidding documents to call for proposals from private participants are ready by month 8. Proposals are being called by month 10. |
| | C. Do preparatory studies for implementation of the sector reorganization and to write the Bidding Documents. | All studies completed by month 6. |
| 4) Formulation and elaboration of a legal and institutional framework adequate to the chosen option | A. Legal and institutional framework A.1. Analysis of the present legal framework for the sector and strategy for the transition to a new framework. A.2. and A.3: Analysis and formulation of the elements to be introduced in the new legal framework. A.4. Institutional aspects of the legal framework. A.5. Preparation of required laws and statutes. | All legal laws and/or statutes are written and approved by parliament and/or GOH by month 10. |

| MIF HAITI PRIVATE PARTICIPATION AND LEGAL-REGULATORY REFORM OF THE ELECTRIC SECTOR | |
|--|--|
| B. Tariff Study; structures, organization and procedures for institutions. Determination of training needs. Environmental aspects. | All studies completed by month 12. Embryonic regulatory institutions are in place by month 12. Plan of implementation of institutional framework is ready and being carried-out by month 12. |
| C. Training by other regulatory agencies | Completed by month 24. |

PROPOSED RESOLUTION

HAITI. NONREIMBURSABLE TECHNICAL COOPERATION FOR AN
ELECTRIC SECTOR REFORM PROJECT

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 agreements as may be necessary with the République d'Haïti and to take such additional measures as may be pertinent for the execution of the memorandum of proposal referred to in Document MIF/AT- with respect to a technical cooperation for an Electric Sector Reform Project.

2. That up to the amount of US\$1,169,000, or its equivalent in other convertible currencies, is authorized for the purpose of this resolution, chargeable to the resources of the Technical Cooperation Facility of the Multilateral Investment Fund.

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