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PRIVATE POWER DATABASE

COUNTRY PROFILE:

DOMINICAN REPUBLIC

A Report of:

Private Sector Energy Development Program
Office of Energy
Bureau for Science and Technology
United States Agency for International Development

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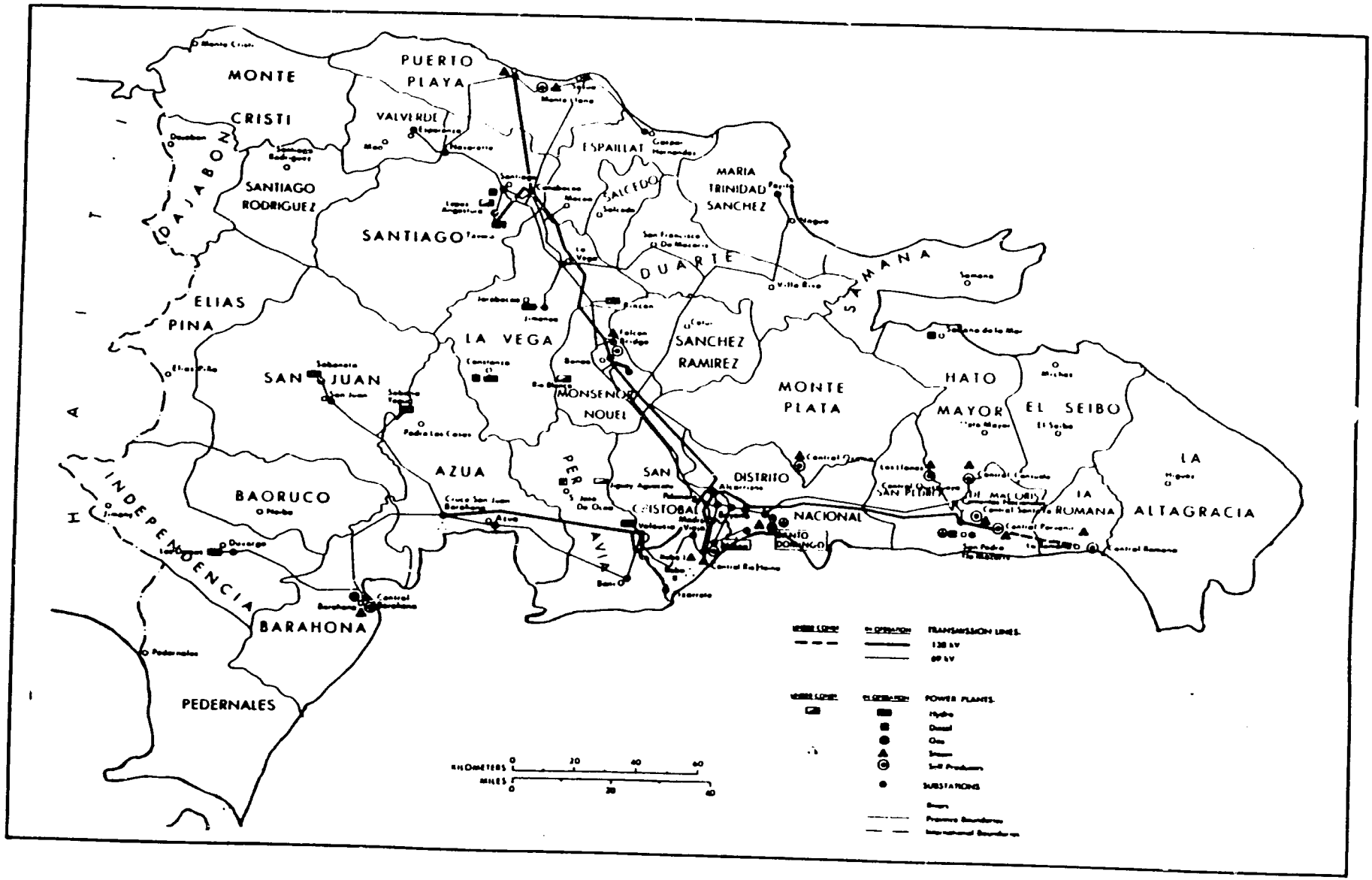
DOMINICAN REPUBLIC POWER SYSTEM



Source: The World Bank

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INTRODUCTION

This country profile is one of a series of reports generated from the Private Power Database of the Agency for International Development (A.I.D.). Database country profiles are also available for Pakistan, India, and the Philippines. The Private Power Database contains information on power sector developments in A.I.D.-assisted and other countries with private sector involvement or offer opportunity for private sector project development. The database covers government policies, cogeneration projects and opportunities, private power projects and opportunities, government contacts, equipment vendors, and program activities of international development organizations. It also contains a bibliography of private power publications. RCG/Hagler, Bailly, Inc. maintains the database under the A.I.D. Office of Energy's, Private Sector Energy Development Program.

Private Power Database Country Profile: Dominican Republic is divided into two parts. Part 1 provides a brief overview of the power sector in the Dominican Republic and the status of private sector participation. Part 2, which starts with a glossary of terms to explain the terminology used in the printouts, contains the private power database printouts for the Dominican Republic. It is divided into sections and contains database entries for the Dominican Republic. Appendix A is a copy of the english translation of the new private power law enacted in the Dominican Republic. The law explains the process for applying to the program, the incentives provided in the program, as well what projects qualify.

The information contained in this report is the product of research and data collection, principally from secondary sources. Limited access to data on private sector developments and the dynamic nature of these developments mean that the information contained in this report may not always reflect the most current private power developments. Therefore, readers are encouraged to contact individuals listed in the project profile or private power contacts listing for updates. The Agency for International Development and RCG/Hagler, Bailly make no claims as to the accuracy of the information.

For more information on private power developments, contact:

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PART 1: OVERVIEW OF THE POWER SECTOR

The following is a brief description of the power sector in the Dominican Republic. It is intended to provide the reader with information on the current status and expected developments in the country, including electricity demand and supply, energy resources, and the status of private power.

BACKGROUND

The Dominican Republic is a Caribbean country of 6.9 million people covering the eastern part of an island shared with Haiti. The official language is Spanish. Per capita GNP in 1987 was $730. The national currency is the Peso. The average market exchange rate with the U.S. dollar over the period 1987 to 1989 is given in Exhibit 1.

Exhibit 1:

Peso to U.S. Dollar Exchange Rate, 1987-1989

	Pesos		U.S. Dollar
June 1987	P 3.6	=	$1
June 1988	P 6.4	=	$1
June 1989	P 6.3	=	$1

Source: International Monetary Fund

The Dominican Electric Power Corporation (Corporacion Dominicana de Electricidad (CDE)) commenced operations in 1955 when the Dominican government acquired the Santo Domingo Electric Company which had been a subsidiary of Stone and Webster Corp. (USA). Thereafter, the government progressively acquired and merged into CDE's operations other private electric companies. Consequently, CDE is a hybrid of several companies.

The country is currently suffering from a prolonged crisis in its electric service. Partly due to insufficient tariffs, the national utility accounts for nearly two-thirds of the entire deficit of the consolidated public sector. The existing generating, transmission and distribution facilities are deteriorating with system losses of over 30%. Daily blackouts of 8 to 12 hours are being experienced in certain areas.

The degree of electrification is relatively low when compared with other Latin American countries. Only about 38% of the total population has access to electricity. Electricity consumption per capita (utility sales only) was about 370 kWh in 1986.

The total investment required for expansion of the power system in the Dominican Republic between 1989 and 1999 is just over $2 billion, of which only 15% is expected to come from domestic sources. According to the World Bank, generation capacity represents the largest share of investment required, totaling $1.5 billion. Transmission expenditures are expected to be $143 million; distribution, $357 million; and general expenditures, $115 million. Private power is seen as a means of facilitating foreign investment in the power sector.

POWER SECTOR INSTITUTIONS

There are a number of organizations involved in the power sector in the Dominican Republic. The principal institutions and their respective responsibilities are described below.

- **National Commission for Energy Policy (Comision Nacional de Politica Energetica (COENER))** is an advisory board to the President of the Republic, and is in charge of planning and developing policies for electricity generation and the rational use of the country's indigenous and imported energy resources. COENER is directly responsible to the Technical Secretary to the Presidency.

- **Dominican Electric Power Corporation (Corporacion Dominicana de Electricidad (CDE))** is an autonomous electric utility which operates the main public service in the country and reports directly to the President of the Republic. CDE establishes operating and development programs for the power sector, and proposes electricity tariffs for the President's approval.

- **National Institute of Hydraulic Resources (Instituto Nacional de Recursos Hidraulicos (INDRHI))** is responsible for planning, studying, and programming all hydroelectric works, and operates and maintains publicly-owned irrigation systems.

- **Directorate for the Development and Regulation of the Electrical Energy Industry (Direccion para el Desarrollo de Electricidad Nacional)** is the newly formed autonomous organization responsible for the coordination and regulation of the electric industry and implementation of the new private power legislation. The Board of Directors is composed of the Minister of Industry and Commerce, the Minister of Finance, the Technical Secretary to the Presidency, the Governor of the Central Bank of the Dominican Republic, and representatives from various private sector groups.

ELECTRICITY DEMAND

Electricity generation increased at an average annual rate of 9.2% between 1970 and 1987, reflecting the state of the economy, low utility tariffs, and increasing losses. Sales registered an 8.4% annual increase over this period, although they followed a different pattern than trends in energy supply due to high levels of unbilled consumption.

Residential consumption accounted for approximately 40% of the total demand, or 1,100 gigawatt-hours (GWh) in 1987. The industrial sector was the second largest consuming sector accounting for 28% (764 GWh). The commercial sector consumed 12% (315 GWh), while government operations and other operations consumed the balance (531 GWh).

It should be noted that these figures do not accurately reflect the demand in recent years because there is suppressed demand caused by the shortages of supply and a number of commercial and industrial enterprises generate their own electricity. The lack of reliable data on self-generation gives an inaccurate picture of the national electricity market and limits the accuracy of estimating future growth in demand.

Forecasts of future demand reflect likely trends in economic variables, the CDE investment plan, and prospects for reducing losses. Between 1988 and 1998, the Inter-American Development Bank estimated final consumption to grow from 3,043 GWh to 7,245 GWh, an average annual increase of 6.5%. During this period, unserved demand is expected to decline from 601 GWh to 70 GWh.

ELECTRICITY SUPPLY

The total installed generation capacity in the Dominican Republic in 1989 was 1,176 MW, of which 47% was oil-fired steam, 19% was coal/lignite-fired, 17% was hydroelectric, and 16% was combustion turbines. Over the next 10 years, additions in generation capacity are expected to either hydroelectric or coal/lignite (see Exhibit 2). This expansion does not account for unsolicited proposals from the private sector.

The generating system in the Dominican Republic is almost entirely interconnected: all but 4.4. MW of CDE's capacity is in the connected system. Several sugar mills and a mining company are also tied into the national grid. CDE's system is divided into five subsystems: Santo Domingo, the Northwest, the Northeast, the South, and the East.

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Exhibit 2:

Installed Generation Capacity
1989 and 1999
(Megawatts)

	1989	1999	Increase (MW)	(%)
Hydroelectric	205	380	175	85
Geothermal	0	0	0	0
Nuclear	0	0	0	0
Oil				
Steam	552	552	0	0
Combustion turbine	186	186	0	0
Combined cycle	0	0	0	0
Diesel	14	0	(14)	n.a.
Natural Gas				
Steam	0	0	0	0
Combustion turbine	0	0	0	0
Combined cycle	0	0	0	0
Coal/lignite	219	1,136	917	419
Total Capacity	**1,176**	**2,254**	**1,078**	**73**

Source: World Bank

Industrial self-generation plays an important role in the Dominican Republic power market. Five large industrial consumers have generation plants which, in 1988, amounted to 42% of CDE's generation capacity. The ferronickel industry, namely the Falconbridge Mining Co., accounts for over two-thirds of this capacity. In recent years, due to a reduction in its own activity, it has increased its sales to CDE, amounting in 1988 to 13.7% of CDE's net generation. The national sugar council (CEA) has 62 MW of bagasse-fueled units, and has generated, mainly for its own use, the equivalent of 3.8% of CDE's generation. The total capacity of standby generation units doubled between 1977 and 1985, growing to 240 MW or roughly a quarter of CDE's total capacity. In view of the growing electricity shortage, the government issued Decree 1613 of January 1976 stipulating that, in order to receive a license, all new companies requiring more 8 MW of demand should have their own generating facilities.

ENERGY RESOURCES

The pattern of primary energy supply reveals heavy reliance on imported oil. Imported oil and oil byproducts account for 30 percent of total imports, and correspond to over half of foreign exchange earnings. In 1987, oil accounted for 62% of total primary energy sources, of which the electric power sector absorbed 38.4%.

The Dominican Republic's indigenous energy resources are scarce. Oil exploration has not identified any commercially exploitable oil deposits. Lignite reserves have been found in the northern region of the country, however, they have not been utilized due to unfavorable characteristics of the coal. The country's hydroelectric potential is estimated at 2,000 MW. Only 20% of this resource has been or is in the process of being developed. Biomass plays an important role among the renewable resources for producing heat and electricity in sugar mills. Two bagasse-fired thermal plants are under construction, which would double the current sugar mill generation capacity. There are indications of geothermal resources in the central mountains, but extensive field exploration would be needed before an assessment can be made on the possibilities of commercial exploitation.

STATUS OF PRIVATE POWER

As stated earlier, there is a history of private sector power generation in the Dominican Republic, largely a result of inadequate supply from the grid. In 1988, the Government issued an emergency decree calling upon the private sector to submit proposals for new power stations to coincide with shutting down CDE units during a three-year rehabilitation project funded by the World Bank.

On February 26, 1990, the National Congress passed legislation designed to stimulate private sector development of power projects throughout the country. The law calls for the establishment of a Directorate for the Development and Regulation of the Electrical Energy Industry which will be responsible for implementing the law. Initially, the law allows the private sector to own and operate new transmission and distribution systems, as well as generation.

The first private power project in the Dominican Republic began operating in May 1990. It is owned and operated by Seaboard Corporation and was developed by Transcontinental Capital Corp. Ltd. of Bermuda (a subsidiary of Seaboard). In addition, it is expected that many of the power generation proposals submitted prior to the new private power law which did not go forward due to political uncertainty will also be revisited. Also, since the law establishes incentives for foreign as well as domestic private investments, new proposals are expected from foreign developers.

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PART 2: PRIVATE POWER DATABASE PROFILES

The profiles contained in this section are printed directly from the U.S. Agency for International Development Office of Energy's Private Power Database. A *Glossary of Terms* is provided as a key to the terminology used in the database reports. The *Government Policies* section recounts policy developments relevant to private sector interests in the power sector and provides the legal and regulatory framework for private sector involvement. They cover power generation, power sales to the local utility, interaction with the grid, power purchase pricing, fuel use and price, foreign investment, importation of equipment, and environmental and/or safety standards. The *Private Power Projects* and *Cogeneration Projects* sections contain information on projects that have progressed to some stage of development, such as completion of a feasibility study, application for government clearance, the granting of a letter of intent, or the negotiation of a power purchase agreement with the utility. For both cogeneration and private power projects, an indication of the status of the project is given, i.e., inactive, active or operating. Depending upon a project's status, these sections identify a market for equipment vendors, engineering firms, financiers, and other project development services.

The *Private Power Opportunities* and *Cogeneration Opportunities* sections provide leads on prospective project development opportunities. Cogeneration and private power opportunities are potential projects for which little or no development has occurred. In many cases, there is only limited information available on the location, size and type of power system, since no commitment has been made to the project. The *Government Contacts* list provides names and addresses of key people in the Dominican Republic to contact on private power issues and opportunities. The last section, the *Bibliography* contains an annotated list of relevant publications for additional reading on the subject of private power in developing countries. Finally, we have added *Appendix A*, which contains an English translation of the official "Incentive for National Electricity Development in the Dominican Republic."

The following terms are used in one or more of the private power database profiles. For each term, a brief definition is given and, where appropriate, an explanation of the various abbreviations used.

CAPACITY: Nameplate generating capacity of installation in megawatts (MW).

COMPANY: The name of the company sponsoring a cogeneration project.

CONNECTED TO THE GRID: Whether a project is currently or is expected to interconnect with the existing utility transmission system. "Y" - yes; "N" - no; and a blank indicates no interconnection information.

CONSULTANT: The consulting engineering company responsible for conducting the cogeneration or private power project feasibility study.

CONTACT: A point of contact for more information on a cogeneration or private power project.

DATE OF POLICY: The date a given private power policy was issued.

DATE UPDATED: The last date for which information was input into the private power database.

DESCRIPTION: Any information on the project technical details, the project sponsors, the project status, or any other pertinent details.

DESIGN DATE: The date on which the engineering design of a cogeneration or private power project was completed.

ELECTRICITY USAGE: The use of the electricity generated by a private power project (e.g., sell to the grid, self-use).

ENGINEERING FIRM: The company responsible for preparing the engineering design of a cogeneration or private power project.

EQUIPMENT TYPE: The specific power generating equipment which a vendor (see SUPPLIER) supplied to a cogeneration or private power project.

EXPECTED COMMISSIONING DATE: The date, past or expected, on which a cogeneration or private power project begins operations.

EXCHANGE RATE: The currency exchange rate between U.S. dollars and the local currency, including the year in which the exchange rate is given. The rate is based on the average market rate that year as published by the International Monetary Fund.

EXPORT EXCESS ELECTRICITY: Whether or not the project is designed to sell excess power to the grid. "Y" - yes ; "N" - no; and a blank space means no information.

FEASIBILITY STUDY DATE: The date of completion for a cogeneration or private power project feasibility study.

FUEL: The fuel(s) used in the power generating system (i.e., coal, oil, natural gas, diesel, wood, agricultural waste, solid waste, bio-methane, other biomass, waste heat, solar, wind, water, geothermal, ocean energy).

FUEL SUPPLY SOURCES: The source of fuel for the project if known. A blank indicates unknown source of fuel supply.

GOVERNMENT/UTILITY CLEARANCE: Any indication whether the local utility has given a private power project clearance to interconnect with the grid.

INTERCONNECTION ISSUES: Any details pertaining to the interconnection of the installation with the existing grid. A blank indicates no information is available.

LOCATION: The geographic location of the project, including distance to major cities.

MAIN FEATURES: The main provisions of a given private power policy.

NEW INSTALLATION/RETROFIT: "N" - New; "R" - Retrofit.

OWNERSHIP: Information on the rights to develop the site of a specific private power or cogeneration opportunity. This information is incorporated in the "description" of the database reports.

PROJECT COST: The installed cost of a cogeneration or private power project, including the currency and the year in which the cost is given. Costs are given in exponential terms (e.g., 5000 = 5E3), and are divided into foreign exchange and local currency components.

PROJECT FINANCING: Any details pertaining to the financing of the project, including cost estimates.

STATUS: Current status of a cogeneration or private power project. "INACTIVE", "ACTIVE" or "OPERATING" indicate inactive or discontinued development, active development, or operating, respectively.

SUPPLIER: The company responsible for supplying all or part of the power generating equipment used in a project (see EQUIPMENT TYPE).

TITLE: The title of a government policy (in English).

TYPE OF POLICY: The areas covered in a specific government policy. Options include power generation, power sales, interaction with the grid, power purchase pricing, fuel use/price, environment/safety, foreign investment and equipment import. "X" denotes the specific provisions covered under the policy; "-" indicates not covered.

TYPE OF PLANT: The type of industry and commercial operation at the site of the installation in a cogeneration project (e.g., oil refinery, sugar mill).

TYPE OF POWER SYSTEM: The technology employed in the power generating system (i.e., boiler/steam turbine, combined cycle, combustion turbine, diesel generator, hydroelectric, non-conventional).

USE OF HEAT: The application in which the thermal energy output of a cogeneration system is used (e.g., food processing, space heating).

UTILITY/OWNER AGREEMENT: "Y" - indicates that a power purchase agreement exists; "N" indicates that no agreement exists; a blank space indicates that there is no information as to the existence of such an agreement. The year in which a power purchase agreement was signed is listed as the "DATE".

TITLE: Incentive for National Electric Development

DATE OF POLICY: 02/01/90

TYPE OF POLICY:

POWER GENERATION:	X	ENVIRONMENT/SAFETY:	X
POWER SALE:	X	EQUIPMENT IMPORT:	X
INTERACTION WITH THE GRID:	X	POWER PURCHASE PRICE:	X
FUEL USE/PRICE:	X	FOREIGN INVESTMENT/OWNERSHIP:	X

RESPONSIBLE ORGANIZATION: Directorate for the Development and Regulation of the Electrical Energy Industry

OBJECTIVE:
The objective of the law is to promote and stimulate local and foreign private sector investment in power supply.

MAIN FEATURES:
The law creates the Directorate for the Development and Regulation of the Electrical Energy Industry, consisting of the Minister of Industry and Commerce, Minister of Finance, Technical Secretary to the Presidency, Governor of the Central Bank, plus representatives from the National Businessmen's Council, the Association of Industries of the Dominican Republic, the Federation of the Chambers of Commerce, and the Dominican Free Trade Zones Association. The Directorate shall be the coordinating and regulating organization for the electrical energy industry in the country, including setting rates, establishing planning policies, defining interconnection standards, and supervising contracts. The Directorate must prepare implementing regulations to be submitted to the President. The law covers the installation of new generating plants as well as new transmission and distribution lines. During the first four years, projects that improve or increase the production and/or efficiency of existing generating plants are included in the law. The entire country is covered by the law, until determined otherwise by the president. Projects qualifying under the law shall enjoy income and other tax deductions, import tax exemptions, state guarantees covering the repayment of import loans and repatriation of foreign investment. Projects may be authorized to distribute and market their output to entities other than the national electric company (CDE). The state guarantees authorized contracts between private generators and CDE. Non-conventional generating technologies, i.e., solar energy, geothermal, wind, hydroelectric, nuclear, biomass, dendrothermal or municipal solid waste, shall receive priority, including purchase rates that account for savings in foreign exchange and positive effects on economic development in the country. Proposals must contain information on engineering, cost, generation technology, local participation, and environmental impact.

DATE UPDATED: 03/15/90

TITLE: Decree No. 1613 Electricity Self-Generation DATE OF POLICY: 1976

TYPE OF POLICY:

POWER GENERATION:	X	ENVIRONMENT/SAFETY:	-
POWER SALE:	-	EQUIPMENT IMPORT:	-
INTERACTION WITH THE GRID:	-	POWER PURCHASE PRICE:	-
FUEL USE/PRICE:	-	FOREIGN INVESTMENT/OWNERSHIP:	-

RESPONSIBLE ORGANIZATION: Government of the Dominican Republic

OBJECTIVE:
The objective is to meet the electricity demand of new enterprises through self-generation.

MAIN FEATURES:
The decree states that any new enterprise with peak demand in excess of 8000 kW (8MW) must make arrangements to generate its own electricity. Authorization for new enterprise status requires compliance with the decree.

DATE UPDATED: 02/22/88

TITLE: Emergency Power Decree DATE OF POLICY: 1988

TYPE OF POLICY:

POWER GENERATION:	X	ENVIRONMENT/SAFETY:	-
POWER SALE:	X	EQUIPMENT IMPORT:	-
INTERACTION WITH THE GRID:	X	POWER PURCHASE PRICE:	-
FUEL USE/PRICE:	-	FOREIGN INVESTMENT/OWNERSHIP:	-

RESPONSIBLE ORGANIZATION: Government of the Dominican Republic

OBJECTIVE:
The objective is to stimulate proposals for short-term power generation to alleviate immediate power shortages in the country.

MAIN FEATURES:
The Government of the Dominican Republic issued the emergency power decree to allow for the introduction of privately-owned generation through 1991. The three year emergency generation decree was intended to coincide with the necessary shut-down of Corporacion Dominicana de Electricidad (CDE) facilities during a World Bank financed power sector rehabilitation program.

DATE UPDATED: 05/28/89

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TITLE: Law No. 4115 Organization Law of CDE

DATE OF POLICY: 1955

TYPE OF POLICY:

POWER GENERATION:	X	ENVIRONMENT/SAFETY:	-
POWER SALE:	X	EQUIPMENT IMPORT:	-
INTERACTION WITH THE GRID:	-	POWER PURCHASE PRICE:	-
FUEL USE/PRICE:	X	FOREIGN INVESTMENT/OWNERSHIP:	-

RESPONSIBLE ORGANIZATION: Government of the Dominican Republic

OBJECTIVE:
The law establishes Corporacion Dominicana de Electrcidad (CDE) as a state-owned utility with responsibility for electric service in the Dominican Republic.

MAIN FEATURES:
Corporacion Dominicana de Electricidad (CDE) is given the responsibility of a public utility in meeting electricity needs in the Dominican Republic. The CDE Board of Directors must submit for approval to the President, the electric energy tariff for national consumption.

DATE UPDATED: 06/09/87

TITLE: Law No. 4447 Modification of Law No. 4115

DATE OF POLICY: 1956

TYPE OF POLICY:

POWER GENERATION:	X	ENVIRONMENT/SAFETY:	-
POWER SALE:	-	EQUIPMENT IMPORT:	-
INTERACTION WITH THE GRID:	X	POWER PURCHASE PRICE:	-
FUEL USE/PRICE:	-	FOREIGN INVESTMENT/OWNERSHIP:	-

RESPONSIBLE ORGANIZATION: Government of the Dominican Republic

OBJECTIVE:
The objective is to give Corporacion Dominicana de Electricidad (CDE) authority over other power producers in the Dominican Republic.

MAIN FEATURES:
Previously approved by the president, Corporacion Dominicana de Electricidad (CDE) is able to proceed due to public utility and social interest with the "expropriation" of any kind of electric service enterprise provided without concessions for rendering services. CDE is given exclusive concession for the operation of enterprises for electric power production, transmission and distribution throughout the Dominican Republic.

DATE UPDATED: 06/09/87

TITLE: General Rule No. 2217 Ruling CDE-Customer Relations DATE OF POLICY: 1984

TYPE OF POLICY:

POWER GENERATION:	X	ENVIRONMENT/SAFETY:	-
POWER SALE:	X	EQUIPMENT IMPORT:	-
INTERACTION WITH THE GRID:	X	POWER PURCHASE PRICE:	-
FUEL USE/PRICE:	-	FOREIGN INVESTMENT/OWNERSHIP:	-

RESPONSIBLE ORGANIZATION: Government of the Dominican Republic

OBJECTIVE:
The objective is to limit the ability of Corporacion Dominicana de Electricidad (CDE) customers to generate power or resell or redistribute electricity sold by CDE.

MAIN FEATURES:
The electric energy supplied to customers by Corporacion Dominicana de Electricidad (CDE) shall be for their exclusive use and for purposes indicated in their request for service, and can be neither transferred nor resold to any other customer or entity, except under special written agreement with CDE. The CDE can limit, restrict or refuse to provide service in the event of any electrical distribution and/or generation additions as well as changes in contractual clauses concerning electricity purchased by CDE from third parties or non-affiliated enterprises. However, a new policy initiated in 1990, Incentive for National Electric Development, takes precedent over this rule.

DATE UPDATED: 03/28/90

PROJECT NAME: FALCONDO Project

LOCATION: Santo Domingo and Bonao
CONTACT: Falconbridge Dominica
STATUS: Operating

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 198.	PROJECT COST (19) IN :
TYPE OF POWER PLANT: Boiler/steam turbine	FOREIGN EXCHANGE COST:
FUEL: Oil	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID: Y	EXCHANGE RATE (19): U.S. $1.00 =

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE:	ENGINEERING FIRM:
CONSULTANT:	EQUIPMENT TYPE:
UTILITY/OWNER AGREEMENT: (Y) DATE: 1986	SUPPLIER:
UTILITY: Corporacion Dominicana de Electricidad	

EXPECTED COMMISSIONING DATE: Operational

DESCRIPTION:
Falconbridge Dominica (FALCONDO), a Canadian nickel mining venture, began operations in 1973 with the installation of three 66 MW (198 MW) oil-fired units. Currently, two units generate power for sale to the Corporacion Dominicana de Electricidad (CDE). FALCONDO sells the excess power to CDE under a contractual agreement dated February 1, 1986.

DATE UPDATED: 03/09/88

PROJECT NAME: Barge Mounted Project

LOCATION:
CONTACT: Transcontinental Capital Corp., Bermuda
STATUS: OPERATING

TECHNICAL DETAILS

CAPACITY (MW): 43.
TYPE OF POWER PLANT: Diesel generator
FUEL: Diesel
SYNCHRONIZED WITH THE GRID: Y

FINANCIAL DETAILS

PROJECT COST (1989) IN $US : 2.2E8
FOREIGN EXCHANGE COST:
DOMESTIC CURRENCY COST:
EXCHANGE RATE (1989): U.S. $1.00 = 6.3

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:
FEASIBILITY STUDY DATE:
CONSULTANT:
UTILITY/OWNER AGREEMENT: (Y) DATE: 1990
UTILITY: Corporacion Dominicana de Electricidad

DESIGN DATE:
ENGINEERING FIRM:
EQUIPMENT TYPE: Diesel generators
SUPPLIER: Warsila (Finland)

EXPECTED COMMISSIONING DATE: May 1990

DESCRIPTION:
This project was orginally proposed by the Government of Finland. The project was submitted in response to the 1988 emergency power decree. The project originally consisted of four 30 MW (120 MW) barge-mounted power plants using diesel generators. Transcontinental Capital Corporation of Bermuda resubmitted the proposal as a 43 MW plant, consisting of five 6.3 MW and two 5.6 MW Warsila diesel generating sets producing electricity at a voltage of 13.3 kV and a frequency of 60 Hz. The plant began operating in May 1990. Chase Manhattan arranged the financing for the $22 million project using $18 million of "936" funds; insurance is provided by the Overseas Private Investment Corporation (OPIC).

DATE UPDATED: 07/12/90

PROJECT NAME: Haina I and II Projects

LOCATION: Haina Port
CONTACT: Trevor Swett, Stone & Webster, Puerto Rico
STATUS: INACTIVE

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 200.	PROJECT COST (1988) IN $U.S. : 1.08E8
TYPE OF POWER PLANT: Combined cycle	FOREIGN EXCHANGE COST:
FUEL: Natural gas	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID:	EXCHANGE RATE (1988): U.S. $1.00 = 6.4

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE:	ENGINEERING FIRM:
CONSULTANT:	EQUIPMENT TYPE:
UTILITY/OWNER AGREEMENT: ( ) DATE:	SUPPLIER:
UTILITY:	

EXPECTED COMMISSIONING DATE:

DESCRIPTION:
This project involves the installation of four 50 MW (200 MW) gas turbines to be operated eventually in combined cycle with the Corporacion Dominicana Electricidad's (CDE) Haina I and II thermal power plants thus generating a total of 520 MW. It was first proposed by ENSA, a private firm in the Dominican Republic, in March 1988. In August 1988, a consortium made up of Stone and Webster (Puerto Rico) and GENCO Corporation also presented a proposal to the Government of the Dominican Republic. The arrangement would allow the consortium to receive the Haina facilities on a leased basis for twenty years, with full responsibility for operation and maintenance and to sell the electricity to CDE. Financing for the $108 million project would be arranged by the consortium, which has discussed using Puerto Rican 936 Funds. No development has occured on this project.

DATE UPDATED: 01/28/90

PROJECT NAME: IEMCA Central Romana Project

LOCATION:
CONTACT: Abraham Selman, IEMCA, Santo Domingo
STATUS: ACTIVE

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 20.	PROJECT COST (19) IN :
TYPE OF POWER PLANT: Diesel generator	FOREIGN EXCHANGE COST:
FUEL: Diesel	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID: N	EXCHANGE RATE (19): U.S. $1.00 =

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE:	ENGINEERING FIRM:
CONSULTANT:	EQUIPMENT TYPE:
UTILITY/OWNER AGREEMENT: ( ) DATE:	SUPPLIER:
UTILITY:	

EXPECTED COMMISSIONING DATE:

DESCRIPTION:
This project is being proposed jointly by IEMCA (D.R.) and the Central Romana Corporation (D.R.). It would deliver power to two Free Trade Zones, to new hotels in the Romana Resort, and to a pork processing plant. The project is not expected to be connected to the grid.

DATE UPDATED: 01/29/90

PROJECT NAME: IEMCA Emergency Power Project

LOCATION:
CONTACT: Abraham Selman, IEMCA, Santo Domingo
STATUS: ACTIVE

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 128.	PROJECT COST (19) IN :
TYPE OF POWER PLANT: Diesel generators	FOREIGN EXCHANGE COST:
FUEL: Diesel	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID: Y	EXCHANGE RATE (19): U.S. $1.00 =

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE:	ENGINEERING FIRM:
CONSULTANT:	EQUIPMENT TYPE: Diesel generators
UTILITY/OWNER AGREEMENT: ( ) DATE:	SUPPLIER: Caterpillar
UTILITY:	

EXPECTED COMMISSIONING DATE:

DESCRIPTION:
IEMCA (D.R.) has submitted a build, operate and transfer (BOT) proposal to the Corporacion Dominicana de Electricidad (CDE) for four sets of 8 X 4 MW (32 MW) Caterpillar diesel units. The sponsor would contribute 15 percent equity and the balance would be financed by a private commercial bank. The sponsor has approached the Westminster International Bank in Miami for financing. IEMCA would operate the plant for 20 years. The price for the first ten years would be approximately 3.1 cents per kWh; the next ten years it would be 2.8 cents. These rates do not include the cost of fuel. At the end of the 20 years, the IEMCA would transfer ownership to CDE.

DATE UPDATED: 05/28/89

PROJECT NAME: IEMCA Playa Dorada Hotel Projects

LOCATION: Playa Dorada, Puerto Plata
CONTACT: Abraham Selman, IEMCA, Santo Domingo
STATUS: ACTIVE

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 10.	PROJECT COST (198/) IN US $: 1.5E6
TYPE OF POWER PLANT: Diesel generator	FOREIGN EXCHANGE COST:
FUEL: Diesel	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID: N	EXCHANGE RATE (1988): U.S. $1.00 = 6.4

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE:	ENGINEERING FIRM:
CONSULTANT:	EQUIPMENT TYPE: Slow speed diesels
UTILITY/OWNER AGREEMENT: ( ) DATE:	SUPPLIER: GM
UTILITY:	

EXPECTED COMMISSIONING DATE:

DESCRIPTION:
IEMCA (D.R.) is proceeding with the development of a power plant to generate electricity for the hotels in the Playa Dorada area of the Dominican Republic. IEMCA has purchased ten 1 MW (10 MW) used GM diesels and is organizing a company to implement the project. Ownership of the plant will be part IEMCA (60%) and part hotel owners (40%). The project is not expected to be connected to the grid.

DATE UPDATED: 05/28/89

PROJECT NAME: IEMCA Wood Fired Power Plant

LOCATION: Pedernales, South Coast D.R.
CONTACT: Abraham Selman, IEMCA
STATUS: ACTIVE

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 3.	PROJECT COST (1989) IN US $: 1.7E7
TYPE OF POWER PLANT: Boiler/steam turbine	FOREIGN EXCHANGE COST:
FUEL: Wood	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID:	EXCHANGE RATE (1989): U.S. $1.00 = 6.3

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE: 1988	ENGINEERING FIRM:
CONSULTANT:	EQUIPMENT TYPE:
UTILITY/OWNER AGREEMENT: (Y) DATE:	SUPPLIER:
UTILITY: Corporacion Dominicana de Electricidad	

EXPECTED COMMISSIONING DATE:

DESCRIPTION:
IEMCA (D.R.) has submitted a proposal to the Corporacion Dominicana de Electricidad (CDE) to build a privately-operated, wood-fired power plant. The 3 MW plant would sell power to CDE. IEMCA requires financial and technical assistance and is seeking the support from foreign investors to build this plant.

DATE UPDATED: 02/03/89

PROJECT NAME: Ontario Hydro Thermal Power Power Plant

LOCATION:

CONTACT: Ms. Leslie Barret Sanderson, Ontario Hydro, Toronto (416) 592-5111

STATUS: ACTIVE

TECHNICAL DETAILS	FINANCIAL DETAILS
CAPACITY (MW): 300.	PROJECT COST (19) IN :
TYPE OF POWER PLANT: Boiler/steam turbine	FOREIGN EXCHANGE COST:
FUEL: Coal	DOMESTIC CURRENCY COST:
SYNCHRONIZED WITH THE GRID:	EXCHANGE RATE (19): U.S. $1.00 =

PROJECT DEVELOPMENT INFORMATION

PROPOSAL DATE:	DESIGN DATE:
FEASIBILITY STUDY DATE:	ENGINEERING FIRM: Ontario Hydro
CONSULTANT:	EQUIPMENT TYPE:
UTILITY/OWNER AGREEMENT: ( ) DATE:	SUPPLIER:
UTILITY: Corporacion Dominicana de Electricidad	

EXPECTED COMMISSIONING DATE:

DESCRIPTION:

This 300 MW project would involve used turbines. Ontario Hydro has offered to finance the project, operate the plant and sell the electricity to the Corporacion Dominicana de Electricidad (CDE). As part of the project, Ontario Hydro has offered to provide a $3 million grant for technical assistance and training to some of CDE's staff on the operation of the plant.

DATE UPDATED: 01/04/89

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PROJECT NAME: Metaldom Steel Power Project

LOCATION:
STATUS: ACTIVE
CONTACT: Marcos Cabral, Vice President Metaldom

CAPACITY (MW): 70.	FUEL: Heavy oil
POWER SYSTEM: Diesel generators	FUEL SOURCES:

ELECTRICITY USAGE: Initially designed to meet on-site power needs only.
GOVERNMENT/UTILITY CLEARANCE:
OWNERSHIP: Metaldom is seeking an investor to pursue the project on a build-own-operate (BOO) basis.
PROJECT COST/FINANCING:
No developments.

DESCRIPTION:
Metaldom is a privately-owned, metallurgical iron and steel industry in the Dominican Republic. At present, Metaldom produces over 100,000 tons of steel per year with a power demand of 25 MW, which is provided by Corporacion Dominicana de Electricidad (CDE). They are currently undergoing a US $50 million expansion of their existing plant facilities, which will enable them to increase production to over 500,000 tons per year. Metaldom's growth has increased the company's interest in privatizing its power supply. However, the large investment needed for the steel plant expansion means that the company is not in a position to finance the construction of a power plant as well. The company is seeking an investor to build a 50-70 MW power plant at their facilities, from which they will purchase electricity for a period of ten years, after which the plant will be sold to CDE at an agreed price. Metaldom's steel production employs several electric arc furnaces with a monthly energy consumption of 7,000 MWh, which will increase to a requirement of 24,000 MWh upon completion of the expansion plan. Metaldom's technical director believes the best solution for their power needs would be diesel generators using No 6 oil.

DATE UPDATED: 11/04/88

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PROJECT NAME: Arroyo Barril Power Plant

LOCATION: Northeast coast of D.R.
STATUS: INACTIVE
CONTACT:

CAPACITY (MW): 250.	FUEL: Coal
POWER SYSTEM: Boiler/steam turbine	FUEL SOURCES:

ELECTRICITY USAGE: Sell to Corporacion Dominicana de Electricidad
GOVERNMENT/UTILITY CLEARANCE:
OWNERSHIP:
PROJECT COST/FINANCING:
Estimated cost of the project is US $233 million. Spain had previously approved US $150 million in soft financing (2.5%, 20 years maturity), but the balance was not financed.

DESCRIPTION:
This project involves the establishment of two power plants of 125 MW each, using coal as fuel. The power would then be sold to Corporacion Dominicana de Electricidad (CDE) or directly to end users. Since the proposed location for the plant is on the sea, no access roads will be needed for coal transport. However, if the access channel is not deep enough for large ships, the location of the plant would have to change.

DATE UPDATED: 01/04/89

PROJECT NAME: La Romana II FTZ Project

LOCATION: Near city of Romana.
STATUS: INACTIVE
CONTACT: La Romana Free Trade Zone, La Romana

CAPACITY (MW): 8.	FUEL: Diesel
POWER SYSTEM: High Speed Diesel	FUEL SOURCES:

ELECTRICITY USAGE: Self-generation with possible sale to the grid.
GOVERNMENT/UTILITY CLEARANCE:
OWNERSHIP: La Romana Free Trade Zone
PROJECT COST/FINANCING:
Estimated cost is US $4.40 million.

DESCRIPTION:
La Romana II is near the city of La Romana which has a strong industrial sector, skilled labor, airport, port, schools, and recreational facilities. The first phase of the project should take five years, during this time the La Romana Corporation expects to develop 4 million sq. ft. of industrial park. The industriel mix of the zone is expected to be about 77% garment manufacturers, 9% electronic assemblers, and 14% mixed. After the first phase of the project, demand for electricity is expected to reach 6.5 MW. Consequently, the planners are considering self-generation of electricity to meet this demand using 8 high-speed diesel engine units of 1.5 MW each (12 MW), or two 4 MW (8 MW) low-speed diesel units.

DATE UPDATED: 12/19/88

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PROJECT NAME: Monte Cristi FTZ Project

LOCATION: Pepillo Salcedo, northwest region
STATUS: INACTIVE
CONTACT: Carlos Fernandez, Exergia, Santo Domingo

CAPACITY (MW): 9.	FUEL: Diesel
POWER SYSTEM: Diesel generator	FUEL SOURCES:

ELECTRICITY USAGE: Self-generation to meet demand of industrial park/community.
GOVERNMENT/UTILITY CLEARANCE:
OWNERSHIP: Monte Cristi Corp., Santo Dominigo
PROJECT COST/FINANCING:
Estimated cost is US $4.95 million.

DESCRIPTION:
The Monte Cristi Corp. plans to establish a free trade zone (FTZ) near the town of Pepillo Salcedo. Pepillo Salcedo has an urban population of 3,000 inhabitants and its main source of employment is in the agricultural sector. The industrial mix of the park will be apparel, shoes, and fur which is expected to add approximately 8,000 jobs per year during the first stage of the project (five years). There are also plans to develop an agro-industrial park nearby. It is expected that the creation of new direct as well as indirect jobs to support the industrial parks will generate a local population explosion. This factor, along with the growth of industry, will increase the demand for electricity in Pepillo Salcedo. Corporacion Dominicana de Electricidad (CDE) generation facilities in the area produce a maximum of 1.1 MW whereas the estimated demand of the FTZ and the town after the first phase of the project is 6.3 MW. To meet potential demand, Monte Cristi representatives are considering building their own power facilities. Given the estimated demand of the FTZ and its operational characteristics, it is suggested that six high-speed diesel generators of 1 MW each (6 MW) should be installed during the first phase of the project, or three 3 MW (9 MW) slow-speed diesel units.

DATE UPDATED: 05/02/88

PROJECT NAME: Parque Industrial Itabo SA (PIISA)

LOCATION: Eastern region of the D.R.
STATUS: INACTIVE
CONTACT: Ing. Enrique Tavares, President, PIISA

CAPACITY (MW):	50.	FUEL:	Diesel
POWER SYSTEM:		FUEL SOURCES:	Imported

ELECTRICITY USAGE: Self generation
GOVERNMENT/UTILITY CLEARANCE:
OWNERSHIP:
PROJECT COST/FINANCING:

DESCRIPTION:
This industrial park caters to electronic and pharmaceutical firms. The potential exists to develop up to 50 MW of capacity for use by the industries residing in the industrial park. Westinghouse is one of the biggest clients at the park and the company has expressed an interest in developing a 14 MW project here. This is also one of three projects identified by an Argonne National Laboratory (U.S.) reconnaisance team for use of new coal technology.

DATE UPDATED: 04/05/88

PROJECT NAME: San Isidro FTZ Project

LOCATION: Near Santo Domingo
STATUS: INACTIVE
CONTACT: Carlos Fernandez, Exergia, Santo Domingo

CAPACITY (MW):	13.5	FUEL:	Diesel
POWER SYSTEM:	Diesel generator	FUEL SOURCES:	

ELECTRICITY USAGE: Self-generation for the park, possible sale to the grid.
GOVERNMENT/UTILITY CLEARANCE:
OWNERSHIP: San Isidro Free Trade Zone
PROJECT COST/FINANCING:
Estimated cost is US $5.50 million.

DESCRIPTION:
This free trade zone (FTZ) has access to a highly skilled labor force, technical schools, and developed infrastructure. The plan for the FTZ is to develop 600,000 sq. ft. of industrial park, and 600,000 sq. ft. of commercial office space. The park will be designed to accommodate high-technology industries (office park portion), and manufacturing industries (industrial park). It is expected that the initial phase of the project will be completed within five years. Design of the office park will require that all buildings be 100% air-conditioned, which will increase the electricity load by 50%. Overall, the demand is expected to be 9 watts per sq. ft. for the office park and 6 watts per sq. ft. for the industrial park. Given this, five years demand would reach 8.8 MW and in ten years the peak demand would reach 11.2 MW. To meet this demand, the project planners are considering self-generation of electricity using 9 high-speed diesel generators of 1,500 kW each (13.5 MW). One unit will be used as a backup.

DATE UPDATED: 05/02/88

PROJECT NAME: Barahona Cogeneration Project

COMPANY: Consejo Estatal del Azucar (CEA)
CONTACT: Carlos Morales Troncoso, Consejo Estatal del Azucar, Santo Domingo
TYPE OF PLANT: Sugar mill
LOCATION:
STATUS: ACTIVE

CAPACITY (MW): 42.	PROJECT COST (1988 IN US$): 3.44E7
POWER SYSTEM: Boiler/steam turbine	FOREIGN EXCHANGE:
FUEL: Coal, Ag. waste	DOMESTIC CURRENCY:
USE OF HEAT: Sugar mill processing	EXCHANGE RATE (1988): US $1.00 = 6.4
HEATING MEDIUM: Steam	
CONNECTED TO THE GRID: Y	
EXPORT EXCESS ELECTRICITY: Y	

PROJECT DEVELOPMENT STATUS:

FEASIBILITY STUDY DATE: 1985	DESIGN DATE: 1985
CONSULTANT:	ENGINEERING FIRM:
UTILITY/OWNER AGREEMENT (Y) DATE: 1984	EQUIPMENT TYPE: Boilers
UTILITY: CDE	SUPPLIER:

EXPECTED COMMISSIONING DATE:
DESCRIPTION:
This project will produce 42 MW of electricity for sale to the grid, using bagasse as the primary fuel during the grinding season (6 months per year), and imported coal during the other months. ANSALDO (D.R.), IEMCA (D.R.), and Babcock and Wilcox (Mexico) have signed a contract to build the plant.

DATE UPDATED: 02/14/90

PROJECT NAME: Boca Chica Cogeneration Plant

COMPANY: Consejo Estatal de Azucar
CONTACT: Carlos Morales Troncoso, Consejo Estatal Azucar, Santo Domingo
TYPE OF PLANT: Sugar mill
LOCATION: 35 km east of Santo Domingo
STATUS: ACTIVE

CAPACITY (MW): 17.	PROJECT COST (1986 IN US$): 1.5E7
POWER SYSTEM: Boiler/steam turbine	FOREIGN EXCHANGE:
FUEL: Coal, ag. waste	DOMESTIC CURRENCY:
USE OF HEAT: Sugar mill processing	EXCHANGE RATE (1988): US $1.00 = 6.4
HEATING MEDIUM: Steam	
CONNECTED TO THE GRID: Y	
EXPORT EXCESS ELECTRICITY: Y	

PROJECT DEVELOPMENT STATUS:

FEASIBILITY STUDY DATE: 1985	DESIGN DATE: 1985
CONSULTANT: Payne/Gamei	ENGINEERING FIRM:
UTILITY/OWNER AGREEMENT (Y) DATE: 1984	EQUIPMENT TYPE:
UTILITY: CDE	SUPPLIER:

EXPECTED COMMISSIONING DATE:

DESCRIPTION:

This cogeneration plant will use high pressure boilers to produce power for the Boca Chica Sugar Mill and sell the excess power to the national grid. Bagasse will be used as fuel during the sugar cane grinding season, imported coal will be used during the down season. Bidding on this project will follow the outcome of the Barahona Sugar Mill project.

DATE UPDATED: 02/07/89

PROJECT NAME: Rio Haina Cogeneration Plant

COMPANY: Consejo Estatal del Azucar
CONTACT: Carlos Morales Troncoso, Consejo Estatal del Azucar, Santo Domingo
TYPE OF PLANT: Sugar mill
LOCATION: 10 kms of Santo Domingo
STATUS: ACTIVE

CAPACITY (MW): 60.	PROJECT COST (1988 IN US $): 7.E7
POWER SYSTEM: Boiler/steam turbine	FOREIGN EXCHANGE:
FUEL: Coal, ag. waste	DOMESTIC CURRENCY:
USE OF HEAT: Sugar processing.	EXCHANGE RATE (1988): US $1.00 = 6.4
HEATING MEDIUM: Steam	
CONNECTED TO THE GRID: Y	
EXPORT EXCESS ELECTRICITY: Y	

PROJECT DEVELOPMENT STATUS:

FEASIBILITY STUDY DATE: 1986	DESIGN DATE: 1987
CONSULTANT: Payne/Gamei	ENGINEERING FIRM:
UTILITY/OWNER AGREEMENT (Y) DATE: 1984	EQUIPMENT TYPE: Steam Boilers
UTILITY: CDE	SUPPLIER:

EXPECTED COMMISSIONING DATE:
DESCRIPTION:
This cogeneration plant is one of many sugar mill cogeneration projects proposed by the National Sugar Council, Consejo Estatal del Azucar (CEA). The plant will use high pressure boilers in order to produce electricity for sale to the grid and for internal use. The steam will be used for suger processing. Bagasse will be used as a fuel during the sugar cane grinding season, imported coal will be used during the down season. The plant has not been commissioned.

DATE UPDATED: 02/07/89

PROJECT NAME: Sheraton Hotel Cogeneration Project

COMPANY: Sheraton Hotel
CONTACT: Jim Carey, Caribbean Energy Systems Inc., 143161, Coral Gables, FL 33134
TYPE OF PLANT:
LOCATION: Santo Domingo
STATUS: ACTIVE

CAPACITY (MW): 0.85	PROJECT COST (1988 IN US $): 5.3E5
POWER SYSTEM: Diesel generator	FOREIGN EXCHANGE:
FUEL: Diesel	DOMESTIC CURRENCY:
USE OF HEAT: Air-conditioning	EXCHANGE RATE (1988): US $1.00 = 6.4
HEATING MEDIUM: Water	
CONNECTED TO THE GRID: N	
EXPORT EXCESS ELECTRICITY: N	

PROJECT DEVELOPMENT STATUS:

FEASIBILITY STUDY DATE: September 1987	DESIGN DATE: September '87
CONSULTANT: COGENIC	ENGINEERING FIRM:
UTILITY/OWNER AGREEMENT (-) DATE:	EQUIPMENT TYPE: Packaged systems
UTILITY: CDE	SUPPLIER: COGENICS

EXPECTED COMMISSIONING DATE:
DESCRIPTION:

Caribbean Energy Systems, Inc., the regional agent for Cogenic Energy Systems, identified five promising hotel projects to install on-site cogeneration systems. Four of these are located in Santo Domingo and one in Puerto Plata (i.e., Santo Domingo Sheraton, the Dominican Concord, Gran Lina Hotel and Casino, Fintur Caribe in Santo Domingo; Playa Dorada in Peurto Plata). The proposals submitted to the Sheraton Hotel incorporates a 850 kW Cogenic Module in conjuction with one 430 kW standby generator. The Cogenic Module will produce 850 kW of continuous power and 4,385,000 Btus per hour of hot water from the engine generator. Hot water recovered from the engine jacket at a rate of 1,720,00 Btu/hr. will feed into an absorption chiller unit capable of producing 140 tons of 45 degree F chilled water for the air-conditioning system.

DATE UPDATED: 10/31/88

PROJECT NAME: Christobal Colon Cogeneration Project

LOCATION:
CONTACT: Felipe Vincini, Isabel la Catolica 158, Santo Domingo
TYPE OF PLANT: Sugar mill
TYPE OF SYSTEM: Boiler/steam turbine

NEW INSTALLATION/RETROFIT: R	USE OF HEAT: Sugar processing
CAPACITY (MW): 18.	CONNECTED TO THE GRID:
FUEL: Coal, ag. waste	EXPORT EXCESS ELECTRICITY :

INTERCONNECTION ISSUES: No development

PROJECT FINANCING: No development

DESCRIPTION:
The Vincini family operates one of the three largest sugar mills in the Dominican Republic. The mill already has a high pressure (600 psig) boiler that is operating at 300 psig to service the mills thermal requirements. A cogeneration plant at the Cristobal Colon mill could generate 18 MW of power, consuming 6 MW and selling 12 MW to the grid.

DATE UPDATED: 07/07/88

PROJECT NAME: Consuelo Cogeneration Plant

LOCATION: Eastern region of the D.R.
CONTACT: Carlos M. Troncoso, Consejo Estatal del Azucar, Santo Domingo
TYPE OF PLANT: Sugar mill
TYPE OF SYSTEM: Boiler/steam turbine

NEW INSTALLATION/RETROFIT: N	USE OF HEAT: Sugar mill processing
CAPACITY (MW): 30.	CONNECTED TO THE GRID:
FUEL: Coal, Ag. waste	EXPORT EXCESS ELECTRICITY :

INTERCONNECTION ISSUES: No development

PROJECT FINANCING: No development

DESCRIPTION:
This plant, owned by Consejo Estatal del Azucar (CEA), would utilize bagasse and coal to produce power for the sugar mill and sell the excess to the national grid. Bagasse would be used during sugar cane grinding season, imported coal would be used during the down season.

DATE UPDATED: 04/05/88

PROJECT NAME: Industrias Lavador Projects

LOCATION: Various
CONTACT: Jose Vitienes, Executive V.P., Industrias Lavador, Santo Domingo
TYPE OF PLANT: Cooking oil refining and detergent manufacturing
TYPE OF SYSTEM: Diesel generator

NEW INSTALLATION/RETROFIT: N	USE OF HEAT: Process steam
CAPACITY (MW):	CONNECTED TO THE GRID:
FUEL: Diesel	EXPORT EXCESS ELECTRICITY :

INTERCONNECTION ISSUES: No development

PROJECT FINANCING: No development

DESCRIPTION:
Industries Lavador (D.R.) is an agricultural and manufacturing operation with headquarters in Santo Domingo. Its agricultural operations include peanut and coconut farming and raising poultry, cattle and swine. Manufacturing focuses on refining cooking oil and making detergents. The company has plans to install slow-speed (500 rpm) diesel engines in its manufacturing facilities for process steam that could be operated in a cogeneration mode.

DATE UPDATED: 07/07/88

PROJECT NAME: Ozama Cogeneration Power Plant

LOCATION: 10 miles east of Santo Domingo
CONTACT: Carlos Morales Troncoso, Consejo Estatal del Azucar, Santo Domingo
TYPE OF PLANT: Sugar mill
TYPE OF SYSTEM: Boiler/steam turbine

NEW INSTALLATION/RETROFIT: N	USE OF HEAT: Sugar processing
CAPACITY (MW): 16.	CONNECTED TO THE GRID:
FUEL: Coal, ag. waste	EXPORT EXCESS ELECTRICITY :

INTERCONNECTION ISSUES: No development

PROJECT FINANCING: Estimated cost of the project is US $13.76 million.

DESCRIPTION:
This plant, owned by Consejo Estatal del Azucar (CEA) would use high pressure boilers in order to produce power to sell to the national grid and for sugar mill processing. Bagasse would be used as fuel during sugar cane grinding season, imported coal will be used during the down season. A prefeasibility study has been done, CEA (the national sugar industry) is looking for developers.

DATE UPDATED: 07/07/88

PROJECT NAME: San Pedro (FTZ) Project

LOCATION: San Pedro de Macoris (East region)
CONTACT: Ing. Pineda, Corporacion De Fomento Industrial
TYPE OF PLANT: Cement plant
TYPE OF SYSTEM: Boiler/steam turbine

NEW INSTALLATION/RETROFIT: N	USE OF HEAT:
CAPACITY (MW): 50.	CONNECTED TO THE GRID:
FUEL: Coal, Ag. waste	EXPORT EXCESS ELECTRICITY :

INTERCONNECTION ISSUES: No development

PROJECT FINANCING: Estimated cost would be US $83 million.

DESCRIPTION:
This project is one of three projects identified by an Argonne National Laboratory (USA) reconnaisance team sponsored by the U.S. Department of Energy. The plant would supply power to the Cementos Nacionales Factory and the town of Macoris located within the San Pedro Free Trade Zone.

DATE UPDATED: 04/05/88

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TITLE: Caribbean Basin Renewable Energy Project

AUTHOR: James Levitt

CORPORATE AUTHOR: Levitt and Company, Inc.
SPONSOR: U.S. Department of Commerce, International Trade Administration
PUBLISHER: U.S. Export Council for Renewable Energy
PUBLICATION DATE: July 1988
DOCUMENT HOLDER: U.S. Export Council for Renewable Energy

ABSTRACT:
The report identifies renewable energy project procurement and business development opportunities in the Caribbean Basin for U.S. industry, principally in the commercial and industrial sectors of the local economies. The countries covered in the study are Guatemala, Jamaica, Dominican Republic, and Barbados. Several private power opportunities were identified in the study.

KEYWORDS: Caribbean, Central America, Dominican Republic, Barbados, Guatemala, Jamaica, renewable energy, agriculture, industry, power

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TITLE: Cogeneration in Developing Countries

AUTHOR:

CORPORATE AUTHOR: RCG/Hagler, Bailly, Inc.
SPONSOR: A.I.D./Office of Energy
PUBLISHER: Energy Conservation Services Program
PUBLICATION DATE: May 1986
DOCUMENT HOLDER: RCG/Hagler, Bailly, Inc.

ABSTRACT:
This report analyzes the prospects and problems of cogeneration as an alternative power supply and energy conservation scheme in developing countries. The report first estimates the cogeneration potential in selected A.I.D.-assisted countries; reviews the involvement of international development organizations, and American manufacturers; and discusses the economic, technical, and institutional factors that affect cogeneration development in developing countries. Finally, the report discusses the role of A.I.D. in promoting private sector involvement in cogeneration development as a way to expand power supply and improve fuel efficiency in developing countries.

KEYWORDS: Cogeneration, LDC, private power

TITLE: Country Privatization Strategy

AUTHOR:

CORPORATE AUTHOR: Center for Privatization
SPONSOR: A.I.D.
PUBLISHER:
PUBLICATION DATE: June 1987
DOCUMENT HOLDER: Center for Privatization

ABSTRACT:
This paper provides a framework and guidelines for use by A.I.D. Missions and governments in less developed countries (LDCs) to: 1) shape and pursue a country privatization strategy; 2) identify and bring about needed policy changes; 3) increase public awareness and understanding; 4) privatize a specific government enterprise/facility/activity; and 5) institutionalize the privatization process within an LDC.

KEYWORDS: Privatization, LDC

TITLE: Evaluation of the Present Situation of the Corporacion Dominicana de Electricidad (Spanish)

AUTHOR: Special Commission for the Analysis of the Crisis Facing the CDE

CORPORATE AUTHOR: Special Commission for the Analysis of the Crisis Facing the C
SPONSOR: Government of the Dominican Republic
PUBLISHER:
PUBLICATION DATE: May 1987
DOCUMENT HOLDER: RCG\Hagler, Bailly, Inc.

ABSTRACT:
This study evaluates the present condition of the Corporacion Dominicana de Electriciad (CDE), the Dominican Republic's national electric utility. In this study, recommendations are made for the privatization of the electricity sector and distribution networks. The study finds that distribution losses due to theft, which constitute 35% of non-technical losses, could be alleviated by the privatization of the distribution networks. The authors claim that private sector interests would be more efficient in their accounting practices and reduce the current inefficiencies of the CDE's accounting system. Furthermore, the study gives three recommendations for promoting the privatization of the electricity sector: 1) establish free trade zones for the generation electric energy in units of more than 100 MW; 2) promote the establishment of thermal power plants that use indigenous energy resources; and 3) finally, give up for sale or lease, the distribution system to a private company that can market it effectively. Overall, the incentives for promoting the partial or total privatization of the electricity sector include; serious reductions of the inefficiencies of the distribution system, and private investment opportunities to meet the financial requirements of the expansion plans.

KEYWORDS: Dominican Republic, privatization, electricity

TITLE: Feasibility Report for the Establishment of Independent Power Generation in the Dominican Republic Free Trade Zones

AUTHOR:

CORPORATE AUTHOR: Exergia, S.A
SPONSOR: USAID Mission in Santo Domingo
PUBLISHER:
PUBLICATION DATE: June 1987
DOCUMENT HOLDER: RCG/Hagler, Bailly, Inc.

ABSTRACT:
This report outlines the electric power needs of the free trade zones (FTZs) in the Dominican Republic and explores the feasibility of installing independent power generation systems to satisfy such needs. Specifically, the Romana II, Montecristi and San Isidro FTZs are analyzed. In conclusion, the study recommends policy modifications and implementation measures to promote self-generation of electricity in the FTZs and assure payments to FTZ operators. It discusses the funding and training needs for parties involved with these projects. It also suggests that in-depth feasibility studies should be conducted before any FTZ invests in self-generation projects.

KEYWORDS: Dominican Republic, self-generation, free trade zones, private power

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TITLE: Opportunities for Private Sector Power Generation in Developing Countries: Pakistan, Thailand, India, and the Dominican Republic

AUTHOR: Henri-Claude Bailly, Pirooz Sharafi

CORPORATE AUTHOR: RCG\Hagler, Bailly, Inc.
SPONSOR:
PUBLISHER:
PUBLICATION DATE: November 1987
DOCUMENT HOLDER: RCG/Hagler, Bailly, Inc.

ABSTRACT:
The objective of this document, presented at The Eighteenth National Conference on the Outlook for Cogeneration, is to examine the prospects for private sector power generation in developing countries, specifically, Pakistan, Thailand, India and the Dominican Republic. The document first summarizes the results of studies done on each of these countries. It then goes on to discuss the implications of these results on other developing countries as well as U.S. suppliers of power generation equipment and services. The paper concludes that there is a sizable potential for private power generation in developing countries. It also claims that industrial cogeneration in and power production from waste fuels represent the most attractive options for small scale power systems. It then goes on to identify the impediments to private power development and how these impediments can be overcome.

KEYWORDS: Cogeneration, Pakistan, Thailand, India, Dominican Republic, private power, opportunities

TITLE: Potential and Policy Issues of Industrial Cogeneration in the Dominican Republic

AUTHOR:

CORPORATE AUTHOR: RCG/Hagler, Bailly, Inc.
SPONSOR: A.I.D./Office of Energy and USAID/Santo Domingo
PUBLISHER: Energy Conservation Services Program
PUBLICATION DATE: April 1987
DOCUMENT HOLDER: RCG/Hagler, Bailly, Inc.

ABSTRACT:
This report is an assessment of the potential for cogeneration by the private sector in the Dominican Republic, an analysis of the impediments to development, and recommendations on the first steps required to design and implement a program to exploit this potential.

KEYWORDS: Dominican Republic, industrial cogeneration potential policy

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TITLE: Power Shortages in Developing Countries: Magnitude, Impacts, Solutions, and the Role of the Private Sector

AUTHOR:

CORPORATE AUTHOR:
SPONSOR: U.S. Agency for International Development
PUBLISHER:
PUBLICATION DATE: March 1988
DOCUMENT HOLDER: RCG/Hagler, Bailly, Inc.

ABSTRACT:
Recognizing that "energy shortfalls are causing a serious constraint to development in over half of all A.I.D.-assisted countries," the Committee on Appropriations of the U.S. House of Representatives requested a report from the U.S. Agency for International Development on the "magnitude of the crisis, its implications for future economic and social development and the potential for U.S. technologies and services to address this problem," including an assessment of "appropriate incentives for private sector participation and the feasibility of an Energy Guaranty Program modeled on A.I.D.'s Housing Guaranty Program." This report analyzes the magnitude, causes, and impacts of power shortages in developing countries, identifies possible solutions, describes a role for the private sector, and identifies an appropriate role for A.I.D.

KEYWORDS: Power sector, LDC, electricity demand, private sector

TITLE: Privatization: A Technical Assessment

AUTHOR: L. Gray Cowan

CORPORATE AUTHOR:
SPONSOR: A.I.D./Office of Policy Development and Program Review
PUBLISHER: Center for Privatization
PUBLICATION DATE: August 1987
DOCUMENT HOLDER: A.I.D./Center for Privatization

ABSTRACT:
This study outlines the advantages of privatisation and the barriers that governments in less developed countries (LDCs) face when trying to implement a privatization strategy. The study goes on to define the role that the AID Missions can play in planning the privatization strategy.

KEYWORDS: Privatization, impediments, strategies, LDC

TITLE: Report on Private Participation in the Electricity Sector

AUTHOR:

CORPORATE AUTHOR: K & M Engineering and Consulting
SPONSOR: AID/Private Enterprise Bureau
PUBLISHER:
PUBLICATION DATE: October 1987
DOCUMENT HOLDER: K&M Engineering

ABSTRACT:
K & M Engineering and Consulting, under contract with AID'S Private Enterprise Bureau, performed a preliminary study on the participation of the private sector in the electricity sector in the Dominican Republic. After interviewing with representatives of the public and private sector, the authors concluded that the participation of the private sector is desirable and recommended for the commercial production of electricity. They also recommend restructuring of the Corporacion Dominicana de Electricidad (CDE), the national utility, that will bring it under the eventual management of private industry. In order to create a favorable environment for such initiatives, the study suggests three steps to implement that would require policy changes. The first step is a short-term option allowing private generation and distribution of electric power in the Free Trade Zones; private generation/distribution in selected regions of the country currently served by CDE; and generation for sale to the grid. The second, medium-term step allows for additional decentralization through the establishment of independent regional companies (preferably private or mixed ownership) to distribute and sell electricity. And the long-term step would be to restructure CDE itself with mixed private/public capital ownership.

KEYWORDS: Dominican Republic, private power, power sector

TITLE: The A.I.D. Experience With Independent Power Generation

AUTHOR: James B. Sullivan

CORPORATE AUTHOR:

SPONSOR: A.I.D./Office of Energy

PUBLISHER:

PUBLICATION DATE: August 1988

DOCUMENT HOLDER: RCG/Hagler, Bailly, Inc.

ABSTRACT:

This paper, presented at the Central American and Caribbean Workshop on Private Power and Demand Management, discusses A.I.D.'s involvement in energy and energy conservation and demand management, as well as independent power production in developing countries.

KEYWORDS: Caribbean, Central America, private power, A.I.D., LDC

[Coat-of-Arms of the Dominican Republic]

THE NATIONAL CONGRESS
IN THE NAME OF THE REPUBLIC

Law No. 16-90

WHEREAS: It is an essential function of the Dominican State to create the conditions necessary in order to multiply the source of production, generators of wealth, and thereby establish the mechanisms enabling them to translate into benefits that reach all the sectors of the Dominican population;

WHEREAS: Electrical energy is an essential primary source for the socio-economic development of the nation;

WHEREAS: The construction of electrical energy generating facilities requires a long time and its cost representing a substantial investment for the Dominican State, which is obliged to distribute fairly its limited resources among the several areas that promote the socio-economic development of the Dominican people;

WHEREAS: Private enterprise, national and international, has shown interest in investing in the electrical energy sector;

WHEREAS: The Dominican State understands and guarantees the principle of free enterprise established in article 8, item 12, of the Constitution of the Republic, as faculty for private businessmen, national and foreign, to invest their own resources in any activity from which it is not expressly

HAS GIVEN THE FOLLOWING LAW:

OF INCENTIVE TO THE NATIONAL ELECTRICAL DEVELOPMENT

CHAPTER I

PURPOSE AND APPLICATION

Art. 1.- This Law has as its purpose the promotion and stimulation of new and existing electrical energy companies, national and foreign, that contribute to the economic development of the country, and to that effect, creates the Directorate for the Development and Regulation of the Electrical Energy Industry, which shall have the purposes, powers and responsibilities established in this law and its Regulation.

To this effect, this law and its Regulation establish the incentives that shall be granted as stimulation for the projects and investments that concur with the purposes and goals identified.

PARAGRAPH.- The Directorate for the Development and Regulation of the Electrical Energy Industry shall be the coordinating and regulating organism for the electrical energy industry in the country. Among its functions shall be the implementation of the electric rate, the setting of the planning policy in the sector, the definition of the interconnection, voltage, frequency, potential factor standards and other technical aspects, the supervision of the contracts among companies, the approval of programs for the expansion of generation and the supervision of everything related to the compa[illegible] law and the Dominican Electric[illegible]

Corporation.

Art. 2.- Those companies that shall increase the national electrical generating capacity, via the installation of new generator plants as well as new transmission and distribution circuits for said energy, shall be able to benefit from this law.

TRANSITORY PARAGRAPH.- In the first four (4) years of application of this law, projects that contribute to the improvement and/or increase in the production and/or the efficiency of the existing generating plans in combined cycle and the reduction of loss or fraud, shall also be able to benefit.

Art. 3.- The granting of the incentives and benefits referred to in this law, shall be strictly limited to the development poles, sectors, areas, zones, or regions that are declared to that effect by the Executive Power, save for the justified exceptions foreseen in this law itself.

PARAGRAPH I.- All the national territory shall be considered as the electrical energy zone, until the Executive Power should determine the respective demarcations.

PARAGRAPH II.- The Executive Power shall establish, via Decree, responding to the recommendation of the Directorate for the Development and Regulation of the Electrical Energy Industry, the demarcations and priority sectors in the process of national socio-economic development, per the planning guidance of the physical dimension prepared to that effect.

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Art. 4.- The Dominican State, via the Directorate for the Development and Regulation of the Electrical Energy Industry, shall assume by virtue of this law, the responsibility of planning the demarcations and electrical development sectors declared to be of priority and shall be able to take, via a regulation issued to that effect, the control measures necessary to avoid the speculative maneuvers that would tend to slow or block the electrical development process.

CHAPTER II

QUALIFICATIONS FOR THE INCENTIVES

Art. 5.- The individuals or corporations, national or foreign, that initiate, promote and invest capital or purchase participation in activities concerning electrical energy companies and/or installations, shall be able to recur to the incentives and benefits provided for by this law, per the definitions and requirements to that effect the are established by this law and its Regulations.

PARAGRAPH I.- The individuals or corporations shall be able to deduct from their income, for the purposes of determining their net taxable income, those benefits, earnings or profits, originating from other economic activities or those originating from interest, dividends, capital or stock gains, that they invest in companies or projects that develop activities foreseen in this law.

PARAGRAPH II.- The individuals or corporations that develop electrical energy distribution, production and/or

installation projects, or invest in the companies that develop them, shall be able to effect said investments via the purchase of the capital, securities, titles, bonds and other similar instruments, that may not be liquidated in less than five (5) years as of their issuance, issued by the companies classified by this law.

CHAPTER III

INCENTIVES AND BENEFITS GRANTED BY THE LAW

Art. 6.- The electrical energy installations and activities classified in accordance with the requirements provided to such effect, shall receive the following incentives and benefits according to the categories.

TAX EXEMPTIONS

Art. 7.- The investment of national and foreign capital, including those originating from international loans, duly registered in the Central Bank in conformity with the laws Nos. 251 of 1964 and 861 of 1978, and their respective modifications, or any other law or disposition that regulates said foreign investment, shall be benefited from the following tax incentives:

a) Exemption from 100% of the payment of Income Tax for all the purposes contained in the law and its modifications and/or amplifications, derived by the individual or corporate persons from activities concerning the construction and operation of the electrical energy installations, and the taxes that could apply to the income resulting from interest

and commissions or any other fees for financing operations during the period of exemption provided to that effect; in like manner the revaluation of the assets according to the replacement cost and the deduction of the losses from future profits until fully absorbed, shall be permitted;

b) Exemption from the tax on transferring property purchased for the installation of the facilities of the electrical energy projects, including those related to the registration or filing of mortgages, pledges, encumbrances or other liens, as well as on the construction of said facilities;

c) Exemption from the taxes on the formation of commercial companies or on the increase of their capital.

d) Exemption of national and municipal taxes and those on commercial patent licenses.

e) Exemption from 100% of all the duties and taxes on imports and other related charges, including tariffs, the unified taxes, the ad-valorem, any exchange surcharge or commission, those on internal consumption, as well as those that apply to the transfer of industrialized products, including those established by Law No. 74 of 15 January 1983, and its modifications, on fuels, lubricants, and other articles or products purchased in the country or imported, necessary for the construction, installation, operation, maintenance and repair of equipment, machinery and facilities, including the offices and branches, of the electrical energy according to their approval by

the Directorate for the Development and Regulation of the Electrical Energy Industry. In all cases, the purchase in the country or abroad of fuel, lubricants, and other goods or raw materials, necessary for the operations of the electrical energy companies, shall be able to be conducted with conditions equal to those applying to the Dominican Electric Corporation or any other state entity or company similar to it.

PARAGRAPH.- In no case will the tax-exempt importation of machinery, equipment, spare parts and accessories, fuel, lubricants, raw material, semi-finished products, finished products, packaging and other components, be permitted when these are produced in the country in sufficient quantity and quality and at a competitive price. In order to establish the comparison of prices, the compteting imported price must be added all the duties, taxes and import rates, as well as the "ITBI" (Industrial Products Transfer Tax) and the current exchange differential.

Art. 8.- The projects that benefit from this law may receive from private financial organisms, national and foreign, from the Dominican State, at the expense of its own funds or those that may be provided by the National Budget, the resources originating from the loans or facilities granted to the same State or the Dominican Government or its decentralized institutions, whether by international organisms or national governments, or whether they may be guaranteed or backed by the Dominican State, under an agreement which to that effect shall be celebrated for short, medium or long terms, subject to the regulations established in the

respective agreements.

Art. 9.- The monetary authorities shall guarantee the supply of the dollars required by the demand for the importation of goods and services for the electrical energy generation projects, duly classified. Furthermore, it shall guarantee the repatriation of the dollars that have as origin any foreign investment in electrical energy generation activities, in the manner foreseen by Law No. 861 on Foreign Investment and in accordance with that which is disposed by the Regulation of this Law.

Art. 10.- The tax exemption period corresponding to each electrical energy project, business or company shall be twenty (20) years as of the date of the resolution of approval for the project. A term not to exceed six (6) months in any case is granted to initiate in sustainedly and uninterruptedly, until the termination of the construction work. This term shall be counted as of the date of the approval of the project and its non-compliance will carry ipso-facto the loss of the acquired right.

Any electrical energy generating project, business or company shall be able to obtain from the Directorate for the Development and Regulation of the Electrical Energy Industry the extension of the exemption for up to five (5) more years, if it faithfully proves that a year before expiring the exemption period, no less than half of the share capital has nominally passed, through those years, to the hands of Dominican investors.

CHAPTER IV

DISTRIBUTION, MARKETING AND RATES

Art. 11.- The electrical energy companies benefiting from this law, shall be able to distribute and market its energy in the regions, zones, areas, sectors or poles in which they are authorized to operate by the Directorate for the Development and Regulation of the Electrical Energy Industry, when specifically authorized for that by the mentioned Directorate.

Art. 12.- The electric rate in the different regions, zones, areas, sectors or poles where the companies may be authorized to distribute electrical energy shall be approved by the Directorate for the Development and Regulation of the Electrical Energy Industry after studying and in accordance with the mechanisms and rules to be established in the Regulations of this law. The supply of electrical energy by means of specific contracts between producing companies and determined clients are excepted, in which case the conditions established in said contracts, which shall be filed with the Directorate, shall prevail.

Art. 13.- The contracts that might be signed by the companies in the private sector with the Dominican Electric Corporation on the sale and supply of electrical energy, shall enjoy unlimited guarantee by the State as long as said contracts have been previously authorized by the Executive Power.

CHAPTER V

ADMINISTRATION OF THE [illegible]

Art. 14.- For the application of this law, the Directorate for the Development and Regulation of the Electrical Energy Industry, which shall be an autonomous entity, shall be governed by a Board of Directors composed of:

The Minister of Industry and Commerce who shall preside,

The Minister of Finance,

The Technical Minister of the Presidency.

The Governor of the Central Bank of the Dominican Republic,

who shall be represented in the meetings by the immediately inferior officials they appoint and, in addition, by four (4) representatives of the private sector, chosen by the following entities or groups:

The National Businessmen's Council, Inc.
("El Consejo Nacional de Hombres de Empresa, Inc.)

The Association of Industries of the Dominican Republic, Inc.("La Asociación de Industrias de la Rep. Dominicana, Inc.")

The Federation of the Chambers of Commerce, Inc.
("La Federación de Cámaras de Comercia, Inc.")

The Dominican Free Zones Association.
("La Asociación Dominicana de Zonas Francas")

Art. 15.- At the head of the Directorate for the Development and Regulation of the Electrical Energy Industry there shall be an executive director, who shall be designated by the Executive Power.

Art. 16.- The petition documents by those interested in benefiting from the terms of this law shall be filed in the office of the Directorate for the Development and Regulation of the E[illegible] which shall be created to

that effect, and which shall carry a registry of said petitions in the manner stated in the Regulation.

Art. 17.- The petitions submitted for the consideration of the Directorate for the Development and Regulation of the Electrical Energy Industry shall be approved or rejected within the periods established in the Regulation of this Law, per the different circumstances and documentary levels.

Art. 18.- The petitions that are favorably received by the Directorate for the Development and Regulation of the Electrical Energy Industry shall be the object of a Resolution containing the statement of the economical and technical characteristics that may have served as the basis for its decision. The resolutions issued by the Directorate shall be irrevocable and can only be rendered ineffective when the Directorate proves important infractions by the beneficiaries of the Law, by means of the mechanisms established in the same law and in the Regulation.

CHAPTER VI

REQUIREMENTS FOR THE PRESENTATION OF PETITIONS

Art. 19.- The projects petitioning the incentives of this law must be formulated and presented with the following documents:

a) A draft proposition with the preliminary details on engineering, cost, generation, and local participation.

b) A technical-economic feasibility study; an investment

document stipulating the flow of funds for the term for which will last the amortization of the financing obtained, and an itemized estimate of the dollars requirements for the period for which the tax exemption will last, as well as the impact of the project on the national economy.

c) A study on the environmental impact of the project.

PARAGRAPH I.- The projects for the installation of electrical energy, in order to classify as beneficiaries of this law, must have a minimum projection which will be determined in each case by the Directorate for the Development and Regulation of the Electrical Energy Industry. This organism must approve in each case the minimum requirement of the amount of energy to be generated.

PARAGRAPH II.- The final approval of the project shall be subject to the compliance of the specific Reference Terms which will be submitted by the Directorate.

CHAPTER VII

CONTROLS

Art. 20.- The electrical production projects utilizing unconventional methods and which satisfy the basic criteria of financial and economic feasibility, shall be considered as priority.

PARAGPAPH I.- Unconventional projects utilizing the following [illegible] many sources of energy as their production method shall be considered: solar energy, geothermal, wind,

hydraulic, nuclear, biomasss, tree-thermal or national solid wastes.

PARAGRAPH II.- In order to establish the rates for the production of electrical energy by unconventional methods, the savings in foreign currency and the incidence in the economic development of the country must be taken into account.

Art. 21.- Any electrical energy generation project must comply with the international requirements on environmental pollution.

Art. 22.- The Directorate for the Development and Regulation of the Electrical Energy Industry, through its specialized dependencies, shall oversee all aspects concerning the compliance of the obligations contracted by the companies or individuals by virtue of the concession of the benefits or incentives of this legislation.

Art. 23.- Failure to comply with the obligations by the individuals or corporations benefiting from this law, during the exemption period, upon the Directorate for the Development and Regulation of the Electrical Energy Industry's fulfilling the procedure of proof and summons, and after a reasonable term granted to that effect by the Directorate, as per that which is established in the Regulation, the suspension of the granted tax exemptions or benefits shall be determined.

CHAPTER VIII

SANCTIONS

Art. 24.- Non-compliance by the beneficiaries of this law, of the obligations contracted by virtue of the concessions of the benefits and incentives that are granted them, shall incur the application of the penalties specified in this Regulation, and could incur, furthermore, up to the cancellation of said exemptions and incentives that may have been granted.

The Ministry of Finance, upon recommendation of the Directorate for the Development and Regulation of the Electrical Energy Industry, shall apply the sanction by means of a duly motivated resolution, which must be communicated by bailiff's notice to the interested parties, who shall dispose of the mechanisms according to the laws to enforce their rights. The State shall execute these actions, except in the case of the individuals or corporations to which said sanctions have been applied, show or establish that the non-compliance in which they have incurred was due to force majeure, in which case the necessary time will be granted to correct the infraction, anomaly causing the non-compliance or violation.

Art. 25.- Any individual or corporation importing construction material, furnishings, equipment and any other effects in general, that have been exempted under the sanction of this law, who should sell, lease, loan or commercialize in any way such effects, or who in any should give a use to them other than that for which the exemption was granted, shall be punished with a fine equal to twice the taxes and duties left unpaid. In like manner, said persons shall be responsible for the payment of the corresponding taxes and duties, without

prejudice to any of the other prosecutions that may take place.

Art. 26.- The funds necessary to cover the expenses originating in the functioning of the Directorate for the Development and Regulation of the Electrical Energy Industry, created by virtue of this law, shall be consigned in the Budget and State Public Expenses Law, every year, in the chapter corresponding to the Ministry of Industry and Commerce, as well as a monthly contribution that must be made by the Dominican Electric Corporation and the individuals or corporations dedicated, under the sanction of this law, to the activities it regulates, in proportion to the installed production capacity for electrical energy they may have.

Art. 27.- Despite that which is expressed in the previous article, the Directorate for the Development and Regulation of the Electrical Energy Industry shall be able to obtain resources for its functioning, originating from financing, contributions or donations by organisms and entities, public and private, national and international.

Art. 28.- The Directorate for the Development and Regulation of the Electrical Energy Industry must prepare a bill of Regulation to this law, to be submitted to the Executive Power.

Art. 29.- This law annuls and substitutes any other law or portion of a law that may be contrary to it.

GIVEN in the Meeting Chamber of the House of Deputies

Palace of the National Congress, in Santo Domingo de Guzmán, National District, Capital of the Dominican Republic, on the sixteenth day of the month of January of the year nineteen hundred and ninety, 146th year of Independence, 127th of the Restoration. (s/) Luis José González Sánchez, President; Aminta Vólquez de Pérez, Secretary; Roberto A. Acosta Angeles, Secretary.

GIVEN in the Meeting Chamber of the Senate, Palace of the Palace of the National Congress, in Santo Domingo de Guzmán, National District, Capital of the Dominican Republic, on the sixteenth day of the month of January of the year nineteen hundred and ninety, 146th year of Independence, 127th of the Restoration.

s/

FRANCISCO A. ORTEGO CANELA,
President

s/

SALVADOR A. GOMEZ GIL
Secretary

s/

MESSIN SARRAF EDER,
Secretary Ad-hoc

JOAQUIN BALAGUER
President of the Dominican Republic

In the exercise of the powers conferred upon me by article 55 of the Constitution of the Republic.

I PROMULGATE this law and order that it be published in the Official Gazette, for it to be known and complied with.

GIVEN in Santo Domingo de Guzmán, National District, Capital of the Dominican Republic, this FIRST (1st) day of the month of FEBRUARY of the year nineteen hundred and ninety, 146th year of the Independence and 127th of the Restoration.

s/

Joaquín Balaguer

[law1490.tra/NF wd #16]

The Office of Energy

The Agency for International Development's Office of Energy plays an increasingly important role in providing innovative approaches to solving the continuing energy crisis in developing countries. Three problems drive the Office's assistance programs: high rates of energy and economic growth accompanied by a lack of energy, especially power in rural areas; severe financial problems, including a lack of investment capital, especially in the electricity sector; and growing energy-related environmental threats, including global climate change, acid rain, and urban air pollution.

To address these problems, the Office of Energy leverages financial resources of multilateral development banks such as The World Bank and the InterAmerican Development Bank, the private sector, and bilateral donors to increase energy efficiency and expand energy supplies, enhance the role of private power, and implement novel approaches through research, adaptation, and innovation. These approaches include improving power sector investment planning ("least-cost" planning) and encouraging the application of cleaner technologies that use both conventional fossil fuels and renewable energy sources. Promotion of greater private sector participation in the power sector and a wide-ranging training program also help to build the institutional infrastructure necessary to sustain cost-effective, reliable, and environmentally-sound energy systems integral to broad-based economic growth.

Much of the Office's strategic focus has anticipated and supports recently-enacted congressional legislation directing the Office and A.I.D. to undertake a "Global Warming Initiative" to mitigate the increasing contribution of key developing countries to greenhouse gas emissions. This strategy includes expanding least-cost planning activities to incorporate additional countries and environmental concerns, increasing support for feasibility studies in renewable and cleaner fossil energy technologies that focus on site-specific commercial applications, launching a multilateral global energy efficiency initiative, and improving the training of host country nationals and overseas A.I.D. staff in areas of energy that can help to reduce expected global warming and other environmental problems.

To pursue these activities, the Office of Energy implements the following seven projects: (1) The Energy Policy Development and Conservation Project (EPDAC); (2) The Biomass Energy Systems and Technology Project (BEST); (3) The Renewable Energy Applications and Training Project (REAT); (4) The Private Sector Energy Development Project (PSED); (5) The Energy Training Project (ETP); (6) The Conventional Energy Technical Assistance Project (CETA); and (7) its follow-on Energy Technology Innovation Project (ETIP).

The Office of Energy helps set energy policy direction for the Agency, making its projects available to meet generic needs (such as training), and responding to short-term needs of A.I.D.'s field offices in assisted countries.

Further information regarding the Office of Energy's projects and activities is available in our Program Plan, which can be requested by contacting:

Office of Energy
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U.S. Agency for International Development
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