

Update on PPP Energy Integration Initiative (SIEPAC)

March 12, 2004

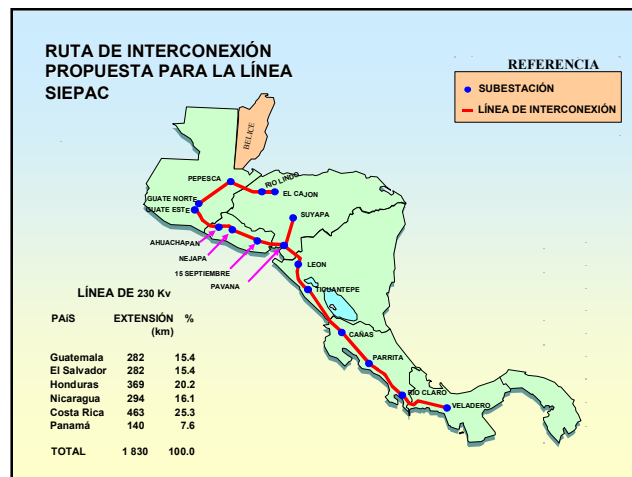
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SIEPAC (the Spanish acronym for Electricity Interconnection System for the Central American Countries) involves the construction of a 1830 km of 230 kV energy distribution line between southern Mexico and Panama. The total cost of the new line is \$320 million, excluding investments to the Mexican grid. The project also includes a \$40 million, 88 km 400 kv interconnection between Guatemala and Mexico, and a \$30 million, 195 km 230 kV interconnection between Guatemala and Belize. An \$200 mn interconnection between Panamá and Colombia is now under review. PPP’s electrical interconnection initiative seeks to improve the region’s power infrastructure and create a regional energy market in order to reduce the cost of energy and rapidly expand energy capacity by attracting private sector investment. SIEPAC is expected to lower the costs of energy distribution by 20% (from the current \$0.11 per kWh to \$0.09 per kWh in 2010) through the creation of a regional energy market. The construction of the new transmission line is expected to begin in 2004 and be operable by 2007.

SIEPAC is the most advanced of all PPP mega-projects in terms of its institutional design and allocation of funding. The initiative creates two supranational institutions - a Regional Regulatory Commission over Electrical Interconnection and a Regional Operations Entity – both of which are to have greater authority over key energy decisions than national governments. The Entidad Proprietaria de la Red/Linea (EPR/EPL) a consortium of mixed public and private capital is the owner of the transmission line, and includes as members, at least initially, the region’s electric power companies - CEL of El Salvador, ENEE of Honduras, INDE of Guatemala, ETESA of Panama, Grupo ICE of Costa Rica, and ENEL of Nicaragua. The EPR will constitute the formal borrower of the loans to finance SIEPAC, and establish the fee for using the transmission line. The Regional Operating Entity board is formed by two members of each country. The Regional Regulatory Commission board is formed by one member from each country. In addition to the six Central American states, the Spanish energy giant, ENDESA, is a shareholder in the



operations consortium. Endesa invested 20% of total SIEPAC investment, another \$70 million comes from a Spanish trust fund at the IDB, while \$35 million comes from the state-owned utilities in-kind contribution of land and equipment and the balance (53%) comes from IDB loans (different instruments-amortization periods ranging from 25-40 years, interest rates ranging from 1-6%).

By lowering the costs and risks inherent to energy distribution, the construction of a regional power line is expected to stimulate investments of an estimated \$700 million per year in additional energy generation over the next decade through the construction of hydro-electric, geothermal, natural gas and biomass power plants.

Consumer advocates, hydro-electric dam opponents and environmentalists have spearheaded the opposition to SIEPAC. They see few guarantees that the benefits for poor households in terms of increased access to electricity will outweigh the costs in terms of further energy privatization, increased user fees, resettlement in the wake of energy mega-projects, weaker environmental commitments and deepened vertical and horizontal integration of the sector by foreign transnationals.

SIEPAC Legal Questions: The financing for SIEPAC comes largely from the IDB, through similar \$30 million loans to each member country. El Salvador was the last legislature to approve the IDB SIEPAC loans, giving SIEPAC the green light to move forward. Questions remain about the legality of the Salvadoran Legislative vote, which is shrouded in controversy over potential violations of the Salvadoran constitution and undue influence by IDB PPP officials in the domestic politics of a Bank member country.

El Salvador was the lone holdout on SIEPAC loan ratification for most of 2002. The principal opposition party in the Salvadoran legislature (FMLN) and several small centrist parties, PDC and CDU, withheld their approval of the SIEPAC loan in El Salvador until late November 2002 – forcing the IDB to issue an extension to keep the loan from being withdrawn. Consumer organizations led by the Center for the Defense of the Consumer, had lobbied effectively to have the loan approval blocked until the Assembly considered the reform the national electricity law – a measure passed several years ago that has contributed to a rapid increase in the price of electricity and the share of household income devoted to energy costs. According to research by the CDC, while El Salvador was one of the first and fastest electricity privatizers, the country now has the highest costs among its Central American neighbors and power prices are set by spot market purchases that are virtually unregulated. These rules and the lack of solid regulatory capacity have led to price gouging among consumers and absurd power purchase agreements between wholesale buyers and sellers of energy. SIEPAC, the CDC argues, will only exacerbate the lack of consumer protections because it will facilitate the rapid vertical and horizontal concentration of power generation, distribution and marketing activities across countries.

The first vote on SIEPAC by the Salvadoran Assembly was on Nov. 28, 2002 (the day the loan was due to expire according to the terms of the IDB rules that provide a country two years to ratify a loan after Bank approval, after which the Bank must retire the loan for a period). The first legislative vote failed, with 52 votes in favor out of 84 total votes - four short of the super majority required for ratifying international loans. Artículo 143 of the Salvadoran Constitution

states: "When a bill is defeated or fails ratification, the bill cannot be proposed again within the next six months." This means, according to experts on Parliamentary procedure in El Salvador, that once the loan was voted on the floor and did not reach the "majority threshold of 43 votes for national/regular projects or 56 votes for International Conventions or Agreements or overpass presidential veto," no further amendments or observations can be made to the bill. It goes straight to the Archives Department. A waiting period of six months is required in order to resubmit the bill again to the legislative procedure as a new bill.

Instead of being archived, the SIEPAC bill was sent back to the Salvadoran Treasury Committee on a motion by the ruling party ARENA deputy, Miguel Bolanos. ARENA argued that the loan was to be reconsidered because it was not a loan to the government but to CEL. It is not clear why this is a valid reason, perhaps caused by the confusion about whether CEL was to administer the loan or that if CEL is an autonomous agency - article 143 did not apply.

In the interim, Marcelo Antinori (the IDB Division Chief in charge of PPP) traveled to El Salvador and convened a public forum for Congressional deputies on Energy Integration, giving opposition deputies the hard sell of SIEPAC. Antinori has traveled on various other occasions to El Salvador to lecture the country on the benefits of regional energy integration. In October, 2002 after another presentation, the Salvadoran newspapers ran the headline that if SIEPAC were delayed, El Salvador would stand to lose \$48 million in foregone revenues. The calculations behind this claim have never been provided by either the IDB or the Salvadoran government.

A second vote was called on Dec. 6, 2002 shortly after the IDB SIEPAC seminar, and barely a week since the first vote. The Salvadoran Assembly reversed its earlier position and approved the SIEPAC loan, with 57 votes in favor – picking up five votes from two small parties. From the news articles and interviews with the CDC, the extra votes by the PDC and CDU, came as a quid pro quo in return for Arena withdrawing proposed reforms to the Electoral Code which would have shifted the electoral debt to party leaders, and essentially preventing small indebted party leaders from running for office in the upcoming March 2003 legislative elections before repaying the debt.

How did the Salvadoran Assembly vote twice on the same loan? Some experts have suggested that if the name of the bill is changed slightly, the six month waiting period can be avoided and the bill can be presented as if it were new. This procedure is considered impossible for international loans that have parallel loans, which have been approved in six other regional Parliaments, it would not be easy to change the name of the bill. In the opinion of two committee clerks and the chief of the Indice Legislativo, who used to be chief clerk, all agreed that this is not a common practice. Only very few times this has happened. Clearly, this IDB loan violated not only the spirit of Article 143 of the Salvadoran Constitution, but may have violated the core principle of this law, challenging the legality of the SIEPAC.

There is yet another violation that occurred with the apparent ratification of the SIEPAC loan in El Salvador. The Democratic Charter of the IDB expressly prohibits IDB staff from personally engaging the political process of its member countries, especially the borrowing countries. Yet, leading up to the second vote on the SIEPAC loan, Congressional deputies were reported to have received repeated phone calls from the IDB office in Washington DC in apparent attempts to

influence their expected vote. These allegations would seem to represent a violation of the IDB's Charter and a second basis for challenging the legality of the SIEPAC loan.

In sum, the saga of SIEPAC in El Salvador provides a glimpse into the stakes involved in PPP moving forward. SIEPAC is the vanguard project of Plan Puebla Panamá – an extremely high profile initiative for the IDB, Mexico and Central America that is coming under both increasing criticism from civil society and indifference from potential investors who sense that the initiative is stalling out. To rescue SIEPAC in El Salvador, the IDB pulled out all the stops, and in so doing, may have violated a member country's Constitution as well as its own Democratic Charter.

Environmental Concerns: Despite outside efforts to widen the scope of what the IDB considers environmental impact in PPP projects, the Bank has insisted on defined social and environmental impact of SIEPAC as the direct effect caused by the 2100 km, 2 km wide right of way over which the transmission line, towers and access roads will be built. This decision conflicts with the June 2003 Memo of Understanding on Sustainable Development signed by all PPP countries that all PPP projects would be assessed in terms of their cumulative impact. The MOU called for strategic and indirect EIAs that would consider the big picture effects. For SIEPAC, a strategic impact assessment would consider not only the direct effects of the transmission line, but the cumulative and indirect impact of the new energy generation capacity construction that the Bank predicts would follow the operation of the line. In 1995, the IDB commissioned a SIEPAC feasibility and initial EIA, the summary of which is available at: www.iadb.org/regions/re2/eiaca0007.pdf and 1000 page, 4 volume full study forecasts several different energy expansion scenarios that would be follow. In 2002, the IDB commissioned updated, national level SIEPAC EIAs and Social and Environmental Management Plans. While CCAD and others called on the Bank to consider the cumulative impact, the IDB preferred to focus on direct impact, which themselves are not negligible and include potential harm to the Guanacaste & Santa Rosa National Parks, Carara Bio Reserve & Turrubares Natural Area in Costa Rica as well as fragile areas in other countries. Presentation of these EIAs were made in March 2003 and are not expected to slow the 2007 expected operation deadline.

Growing TNC Influence: Consumer advocates are concerned about the growing influence of foreign transnational like ENDESA, in their respective national energy markets. ENDESA will be the primary shareholder in the SIEPAC regional owner-operator entity of the transmission network (the EPL, Empresa Proprietaria de la Linea), along with representatives of the six public utilities in the region. While

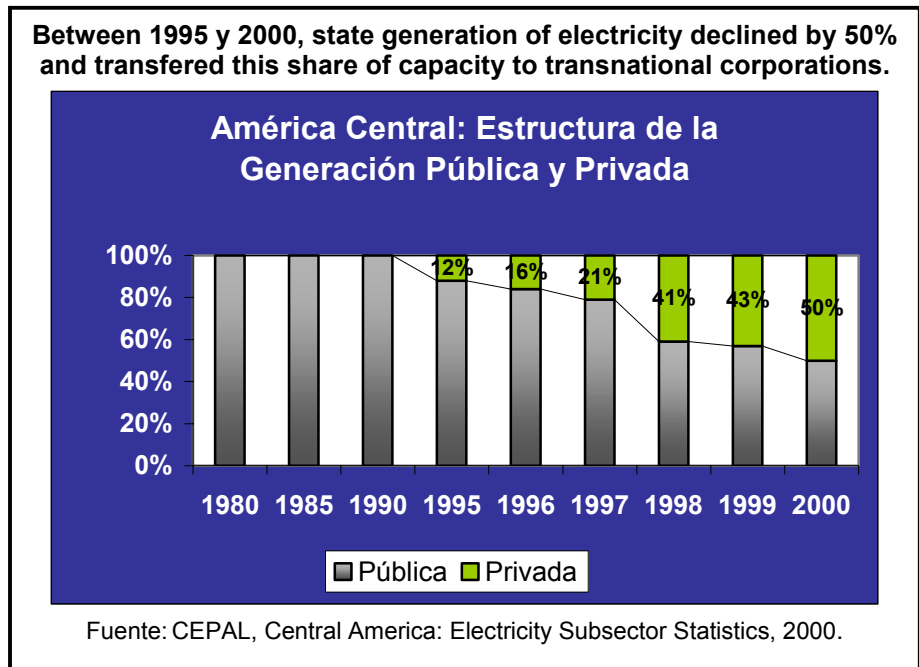
Rank (2001)	Corporation	Worth (\$ billions)
13	DUKE ENERGY	29.3
17	EL PASO	21.2
19	ENRON	20.4
20	REPSOL YPF	17.6
22	ENDESA	16.4
31	BG GROUP	13.6
34	IBERDROLA	12.3
36	DYNEGY	11.3
46	HALLIBURTON	9.7

the IDB claims that Endesa is an associate of SIEPAC like the others, the energy giant that ranks as the 22 largest firm in the sector with a total worth of some \$16 billion and control of 10% of

Latin America's electricity generation capacity (larger than the GDP of Nicaragua, Honduras and El Salvador), will likely exercise a great deal more decision-making power.

The statutes of SIEPAC do not expressly prohibit private or state owned energy entities from vertical ownership of generation, distribution and marketing segments of the industry. In this regard, SIEPAC is using the EU experience in energy deregulation and regionalism as a model. While the IDB has indicated it would have preferred that verticalist ownership schemes be prohibited (where a company can own both generation and distribution elements in the same or different companies) the Bank could not get this regulatory rule accepted (by the Central American presidents). Therefore, nothing prohibits a single company from owning and operating multiple energy generation and distribution networks in the region. This is a major weakness in the regulatory regime. Generation, transmission and distribution activities must be accounted for separately. While some Central American countries have almost fully privatized and delinked energy generation and distribution, in Honduras and Costa Rica the state remains the owner of a vertical generation-distribution institution.

There is a low expected capacity of the national or international institutions to regulate a regional energy market that has baffled U.S. regulatory agencies in California and the Northeast and in the case of Enron and the 2003 blackout. The EPR is responsible for developing the regulating mechanisms/institutions (CRIE – Comisión Regional de Interconexión Eléctrica) for the regional electricity market. The



The CRIE pertains to supranational law that will regulate international electricity trades only, but it will have access to all data concerning the national level markets. Each country is undergoing national level reforms in their respective energy markets and regulatory capacities are only beginning to be defined. IDB energy specialist, Jaime Millan, suggests that national regulatory agencies are totally unprepared for this shift in energy sector. The IDB has extended \$16.4 million in technical cooperation to help fortify these regional regulatory and operating SIEPAC institutions, which require a much larger investment.

In fact, the process of energy privatization has advanced quickly in Central America. Over 50% of state electricity generation capacity has been transferred to foreign transnationals since 1995. This has led to the vertical and horizontal re-integration of the energy sector in the hands for

foreign energy TNCs. The table below lists the U.S., Canadian and European firms that have purchased privatized energy generation, transmission and distribution assets, and are steadily reconstituting private sector oligopolies in Central America.

The structure of the energy industry in Central America reflects a increasing level of vertical and horizontal concentration. AES owns 50% of energy generation in Panamá and 80% of the electrical distribution in El Salvador and has plans to build a large generating station in Honduras with a direct transmission line to El Salvador (vertical re-integration). In Guatemala, Iberdrola controls 70% of the distribution, has a marketer to supply large users, some of the firm's shareholders have generating plants with

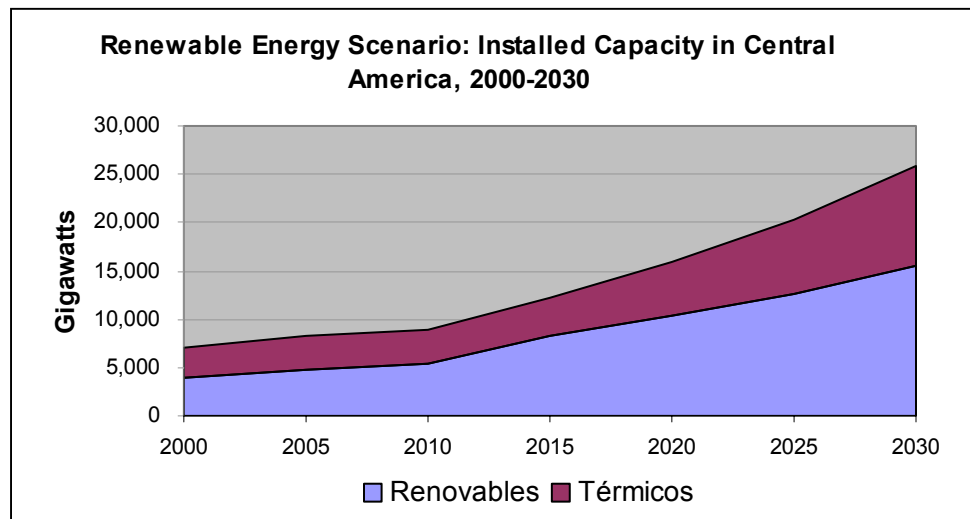
TNC Concentration in Central American Energy Sector				
TNC	Country of Origin	Generation	Transmission	Distribution
AES Corp.	U.S.	Panamá Honduras		El Salvador
Costal (El Paso)	U.S.	Guatemala El Salvador Nicaragua		
Constellation	U.S.			Panamá
DUKE Energy	U.S.	El Salvador Guatemala		
Enron	U.S.	Guatemala Nicaragua Panamá		
PP&L	U.S.			El Salvador
Ormant	U.S.	Guatemala Nicaragua		
Hydro Quebec	Canada	Costa Rica Panamá		
Iberdrola	Spain		Guatemala	Guatemala
Union Fenosa	Spain		Guatemala	Guatemala Nicaragua Panamá

contracts and the firm will build a large generating station. In the Dominican Republic two firms have all the distribution, and re-integration (Generation and Distribution) is taking place through the construction and adquisition of power plants. In Mexico, Union Fenosa and Iberdrola control 30% of the private energy market.

SIEPAC is the key to unlocking significantly greater foreign direct investment in Central American energy generation estimated to reach \$700 million annually for the 10 year period once the regional energy market begins operating. This estimate comes from the 1995 feasibility study commissioned by the IDB done by Power Technologies Incorporated that compared a variety of scenarios for the potential expansion of power demand and supply in the region. The \$700 million estimate refers to a median estimate.

Current regional energy capacity is 7,500 gigawatts is predicted to increase almost fourfold over the next 30 years to 26,000 gigawatts. Current energy demand in the region is 5,000 Megawatts and is expected to increase by 550% in 30 years to 22,000 Megawatts. Opponents argue that SIEPAC will facilitate energy generation for export to Mexico, rather than expanding electricity coverage or lowering costs for Central American consumers. In studies of privatization of power companies in Colombia done by Public Services International, research showed that IFI estimates of future demand, like chronic over-optimistic estimates of GDP growth, resulted in the gross over-inflation of necessary investment. This occurred either because projected demand for energy did not materialize, or because the IFIs tend to inflate these estimates in order to justify the need for private sector participation. This is common as well in the water sector.

New power generation will include both hydroelectric, gas-combustion and thermal units. According to some energy specialists, hydroelectric generating capacity is preferable, but the actual commitments to significant new dams in the region



are in fact quite modest. Private sector firms are leaning away from investments in new hydroelectric dams because they are too expensive and raise political concerns that affect the quick cost recovery. As for natural gas, there is no gas in Central America. It must be imported from Colombia, Venezuela or Mexico. Consideration of a gas pipeline project from Mexico or Colombia persists, but with the collapse of Enron, the original investor in this venture, the project has been put on hold. Panama and Costa Rica are most active in negotiating with Colombia for access to natural gas. Liquid natural gas is also shipped by sea from Trinidad and Tobago to a liquid natural gas plant in Puerto Cabezas, Honduras owned by AES.

In fact, several hundred different potential sites that have been identified and are under consideration for hydro-electric dams. Some of the projects include (Pirris (128MW), Boruca (1000 MW) in Costa Rica; Patuca III (160MW), Cangrejal (500 MW), La Esperanza (12.7 MW), Jicatuyo (170 MW), Tablon (20MW), Llanitos (50MW) in Honduras, La Vacas in Guatemala; Fortuna (300 MW), Chiriqui River series of dams; El Chaparal (90MW), El Salvador; Chalillo, Belize).

In response to thousands of letters protesting the proposed dams on the Usumacinta River that runs from the Petén in Northern Guatemala to Chiapas, the IDB has repeatedly denied that hydro-electric dams are included in PPP. However, few in the region believe that the IDB will prevent these dams from being built. The privatization of Mexico's state power company, the CFE, under pressure by the International Financial Institutions. While the CFE retains control over the public sector energy market, including household consumption, a growing share of industrial and municipal demand is being met by foreign transnationals. Through this modality, TNCs are positioning themselves to dominate the public energy sector when it is eventually privatized.

The CFE will consider \$1.7 billion in new hydro-electric construction in 2004 (La Parota on the Papaguayo River in Guerrero and La Yesca dam in Nayarit). In coordination with the Guatemalan government, the CFE is also reported to be planning five smaller dams on the Usumacinta River. They have conducted topographical studies and are expected to proceed in

2005. These dams would flood communities in Guatemala, some of whom resettled there after 12 years of refuge in Mexico.

Flooding from the Usumacinta dams could cause displacement and harm the Maya Biosphere Reserve, a 13,000-square-mile rainforest that encompasses La Quetzal- one of 60 communities and cooperative settlements on the border between the Petén and Chiapas, just 15 miles from one of the proposed sites,. The reserve, created by Guatemala in 1990, is home to 3,000 plant species, Central America's largest protected freshwater wetland, thousands of archaeological sites and half of the nation's animal species, including the endangered jaguar and guacamaya parrot. Transnational corporations already have tapped the estimated 1.4 billion barrels of crude under the reserve, advancing tropical roads that according to a 1990 World Bank report, states that a single kilometer of which can lead to deforestation totaling as much 5,390 acres.

Plans for damming the Usumacinta have motivated a local movement to raise awareness about the destructive cultural, environmental and social aspects of the project. La Quetzal is one of many Guatemala communities that belong to the Petenera Anti-Dam Front which has spearheaded the organization of opposition to the hydroelectric exploitation of the Usumacinta, Pasion and Salinas rivers in the region. The effective organizing by the Frente Petenera, along with allied organizations throughout the Mesoamerican region, has become a roadblock of sorts for the IDB in terms of its goal of pushing through energy, roads, and tourist projects with little authentic consultation with the affected communities. The IDB complains that rumors about dams on the Usumacinta River amount to a smear campaign against them led by the Zapatista elements that have "contaminated" the indigenous populations of Central America and has effectively stopped PPP momentum in most of Mexico. The IDB has nonetheless been forced to move more carefully in the Peten region and has invested significant new resources in public relations instruments to counter the fading perception of PPP as a lost cause.

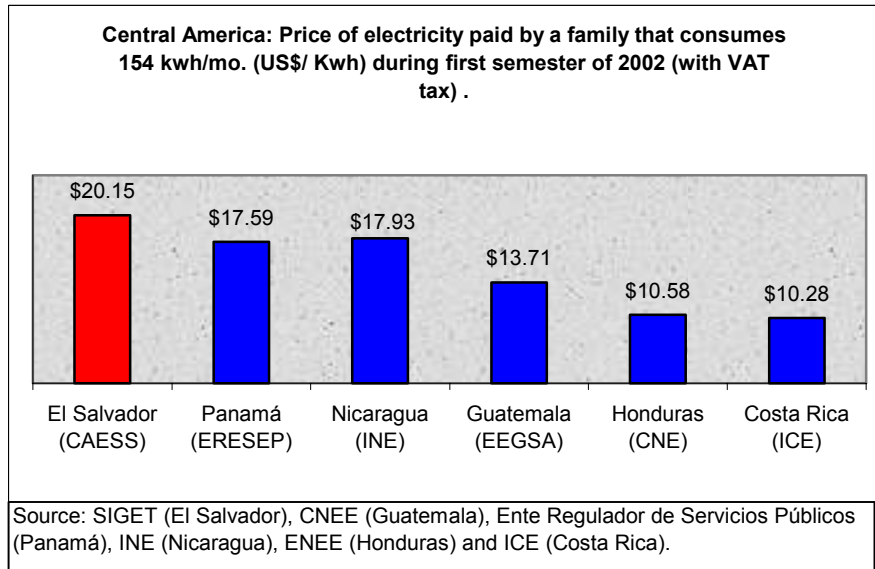
IDB PPP Coordinator, Marcelo Antinori, has public stated that, "the IDB won't discuss dams because we won't fund them. We won't fund them through the private sector department either. The IDB should use the same criteria that it uses for public sector projects for private sector projects. No (energy) generation projects will be discussed on a regional level."¹ However, the Central American Integration Bank, along with CFE in Mexico, JBIC, and Transnational Energy Corporations will finance new hydro-electric power. SIEPAC regional transmission capacity is simply the instrument that will finally ensure that such investments will be able to export energy to the wider market with negligible regulation. The BCIE, which plans to scale up its lending to the region in the coming five years by about \$8 billion, has no environmental, transparency or accountability standards to ensure that its PPP investments will even meet the minimal standards of the IDB. So far, the IDB has been reluctant to hold partner donor institutions in PPP projects accountable.

In February, 2003, CFE announced the initiation of feasibility studies on the 650 MW Copalar hydropower project in Nicaragua, which would double the country's current energy generation capacity and provide electricity to 6 Central American countries.² In addition, the planned project would flood the whole region around Bocana de Paiwas, Nicaragua. The hydro power

¹ Minutes of NGO – IDB PPP Meeting, Oct. 16, 2003, <http://www.interaction.org/idb>

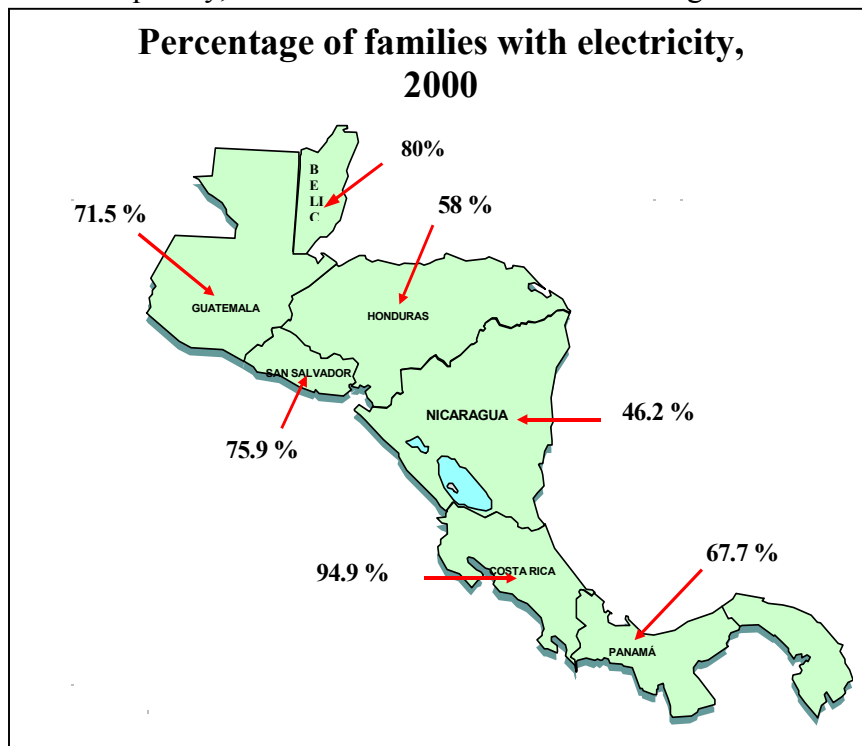
² CFE Press Release, Feb 16, 2003

project was promoted by HydroCopalar consortium, made up of Mexico's Proyectos y Planificación; Switzerland's Voit and Germany's Siemens, which has begun talks with financial bodies in Brazil, Spain and Mexico's Banco Nacional de Comercio Exterior (Bancomext), who have stated their interest in financing such project. The Copalar hydropower generation project is conceived as an essential factor in the Central America area integration plan, whose purpose will be to put such hydro power project in operation in order to interconnect and provide electric power to the six Central American countries. Numerous other hydro-projects are under review.



Under these conditions, SIEPAC is likely to intensify and accelerate energy expansion and privatization in Central America that has offered few significant benefits and has been promoted in a secretive and unconsulted manner, often through conditions of adjustment loans or trade treaty obligations. A recent study by CEPAL shows that where privatization has proceeded the most quickly, the benefits are few for the average consumer.³

Typical household prices for energy in the leading energy privatizers, El Salvador and Panamá, are as much as double what they are for countries where energy production and distribution remain fully or partially state-owned and operated – Costa Rica and Honduras. In recognition that regulators were unable to prevent gaming of the Salvadoran energy market to the disadvantage of consumers, the market faithful ARENA administration was forced to intervene to re-regulate parts of the energy market



³ CEPAL (Nov. 2002) Consolidation Process of Wholesale Electricity Markets in Central America.

in 2003. While only a tiny step toward the massive corruption that is institutionalized in this privatized buying and selling of energy in El Salvador, the intervention provides further evidence of the frailty of the current system to protect the consumer. In addition, the expected gains in increased electricity coverage have not happened. Between 25-50% of Central Americans remain with no electricity access.

The impact of electricity restructuring in Central America has created fragile norms with large gaps that do not favor the consumer as well as regulatory agencies with low capacity or autonomy and therefore high susceptibility to political capture by energy operators. Clearly, investor interests have been favored over citizen interests, which explains in part the strong tendency toward the vertical and horizontal integration of the energy sector (re-oligopolization).