

Third Party Evaluator's Opinion on Transmission (Phase D) Project

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Criteria-1 Relevance

When the project was planned (1990), the structure of the electricity sector in Ecuador was based on the state office INECEL (National Electricity Board) that had a vertically integrated ownership of the generation, transmission and distribution sectors. With the termination of INECEL in 1996, and TRANSELECTRIC S.A. took over the project and executed it successfully. The organization is a 100% owned by the State but a private company, most of the project objectives have been completed as planned basically due to the following facts: 1) Good economic situation of the company and no defaults in payment by the generators and the power utilities (distribution) connected to the grid; 2) Suitable planning of the system expansion to cover the increasing demand; 3) Appropriate maintenance of the installations; 4) Local engineering capacity to keep the system running accordingly; 5) Exclusion from political influence; 6) Clear legal regulations and laws stating its responsibilities; 7) Natural monopoly status; 8) Excellent energy management performed by the National Energy Control Center (CENACE), the Ecuadorian Power Pool market organization; 9) A single actor and contract administrator responsible before the different parties: lender, Ecuadorian Government, contractors, suppliers, users and beneficiaries.

One of the complaints received from TRANSELECTRIC during our research was that the local support from the Japanese vendors is very weak and takes a long time to get a price quotation. Prices of the goods are also very high, and user feel somehow abandoned. The equipment bought is very specialized and TRANSELECTRIC is not willing to change to other supplier to maintain the quality of service.

Criteria-2 Efficiency

The Ecuador's President Rafael Correa who took office January 2007 has decided to restructure the electricity sector from the existing private market-based form to the nationalized one, as once with INECEL and focus in the social and ecological aspects of energy. Large hydroelectric plants are planned to come into operation in the coming 7 years summing up to 3,823 MW, an increase of 96% over the existing 3,973 MW (46% hydro, 46% thermal, 8% imported). Total investment accounts to 3,649 million USD. This additional generation demands the construction of 500 KV transmission lines: Coca Codo Sinclair in the Amazon Region to Quito (approx. 130 km), T/L Quito-Guayaquil (327 km), T/L Paute-Guayaquil (188 km). Also new substations must be built all over the country to provide the required energy. Rate of increase in power is 7.1% p.a. (8.8% in energy). The existing ring of 230 KV has to be reinforced.

Local capacity of TRANSELECTRIC is sufficient to take over these planned projects in transmission. Partial finances are available from the Government using the local funds coming from the excess revenues of foreign oil companies taking the difference from the contract price and the market price of crude oil. (FEISEH funds).

One of the considerations for an effective success of the project is to avoid unnecessary and cumbersome bureaucratic procedures for the execution of the contracts. The Government will be certainly glad to receive some foreign finances to complete the package. Nevertheless, in the year 2008 the whole plan has to be prepared and it is time to present a proposal by the Ecuadorian Government, on condition that it is of interest of the Japanese offices and manufacturers.

Sub-Transmission (Phase B-2) Project

Criteria-1 Relevance

The Sub-Transmission (Phase B-2) Project was the last package executed by the Government prior to the change in the electricity policy in the 1990's to a market based scheme. When the former INECEL, the National Electricity Board was in charge of the generation, transmission and distribution, took over the responsibility to attend the requests of the 19 power distribution utilities in Ecuador. The situation since then has changed dramatically and now most of the utilities are undergoing an economic crisis which has delayed the investment in new projects. The Phase B-2 project financing was backed up by the State and the principal loan had to be paid by the utilities but it has not been the case. The electricity tariff has been dealt politically for the past 8 years. The real cost of 10.8 US cent/kWh for a residential user is set to an average of 8.4 US cent/kWh. The difference or "tariff deficit" which was to be reimbursed to the utilities by the Government has not been paid. Most utilities do not have the money, and cannot buy the generation in long term contract agreements (average US cent 5.6 kWh) and have to do it on the spot hourly basis market that is much higher. "Black" losses or unauthorized connections in some utilities are as high as 35%, most of them in the coastal region. The main cause for this is that managers are appointed not technically but politically, and are weak to enforce payment from users.

The situation of the electrical system is at stake, especially in the rural areas. A rate of increase of 7.1% (nation average) and the lack of investment in new equipment has most of the lines and transformers overloaded. Since there is no money for new investments, the quality of the service in rural areas has deteriorated, and frequent outages occur. The utilities in a better situation are extending their service outside of their allocated areas.

The new policy of the government of President Rafael Correa is to merge some utilities and create regional distribution utilities so that these problems could be handled by the utilities in a better situation. This could also influence the almost 300.000 households that lack electricity in the Amazon region and the border provinces. The rural electrification plan for the period 2008-2012 is set to attend 107.435 new households with an investment of USD 131.4 million. The good share is planned to be done with solar photovoltaic home systems.

Criteria-2 Efficiency

Unless a single organization could act as a valid representative of the various power utilities, it is very difficult to undertake a similar programme in Ecuador. This representative could be the Ministry of Electricity and Renewable Energy (MERE), established in July 2007. This institution could select a local consultancy to assist in all matters related to the contract. A suitable trust fund could be established by means of which the intervening parties (power utilities, MERE, loan providers, Solidarity Fund) agree on the terms of the execution of the different projects. Funding for the distribution system extension and reinforcement projects could come from foreign loans and Government budget. FERUM (the Rural Electrification Fund) could provide the additional funds for the rural remote households with photovoltaic systems. Selection and qualification of the projects could be done by CONELEC (National Electricity Council) following clear procedures, since it supervises the utilities and prepares the national electrification plan. CONELEC National Electrification Plan 2006-2015 considers the investment of: 2,252 km of sub-transmission lines for USD 112,929,581; 1,783 MVA in substations for USD 164,790,603; primary feeders for USD 259,642,471; distribution transformers for USD 114,342,366 and secondary feeders for USD 211,055,768.