RSVP RENEWABLES FOR SUSTAINABLE VILLAGE POWER

PROJECT BRIEF

Argentina: Concession for Rural Electrification Services

by Peter Lilienthal 7/98

Background

Province-by-province, Argentina is privatizing its electric power sector using two process tracks: grid-connected service and off-grid service. The Secretaria de Energia, in collaboration with provincial authorities, has identified the maximum grid extension region for the near future. All areas outside that region are eligible for regulated nongrid-connected service. The concession to provide this service as a regulated monopoly is being allocated through a competitive auction. Though details differ in each province, a consistent part of the program is the maximum tariff that the private company can charge. Two auctions in 1996 and a third, held in 1997, will serve as the pilot for a nation- wide program funded by the World Bank.

Scope

The National Renewable Energy Laboratory (NREL) has provided technical assistance to the Argentine concessions program. NREL staff helped in the design of the subsidy and tariff structure and in estimating the costs of the program. The subsidy and tariff structure provides the concessionaire with a revenue stream sufficient to maintain a sustainable operation and gives the end-users appropriate incentives to ensure efficient use of the electri-city. These two features are often absent in rural electrification programs and result in substantial burdens to the government and limit the expansion of rural electrification services. NREL, with assistance from NRECA-Bolivia, reviewed the Secretaria de Energia's estimates of the expected costs of a business supplying solar home systems. They then made recommendations about the estimated costs and the methods used to calculate the likely success of such an enterprise dependent on the size of the business. NREL also provided information on the costs and applicability of hybrid powered, collective mini-grid systems and on the design of systems for the electrification of rural schools.

Status

Using different business plan scenarios, a metho-dology was developed to identify the cost of service and the required tariff and subsidy as a function of the number of customers the business might have. The methodology can be easily adapted to different regions where the business costs and infrastructure requirements may be different. It has been used in two provinces, Salta and Jujuy, where concessions have already been granted. Proceeds from funding of $120 million from |the World Bank and the Global Environmental Facility will allow additional provinces to participate in the concession. Wind resource mapping is also being added to the methodology in the concession program's third province, La Rioja.

Planned Activities

NREL continues to assist in the development and application of the tariff methodology for additional provinces. The methodology may be used as a template in other regions and countries where renewable energy is being considered in rural electrification systems. We are working with the private concessionaire on alternative system designs and wind resource maps will be created for other provinces in the concession program.

NREL Contact

Web site: *http://www.rsvp.nrel.gov*

Peter Lilienthal
phone:303-384-7444
fax: (303) 384-7411
e-mail: peter_lilienthal@nrel.gov

Produced by the National Renewable Energy Laboratory, a U.S. Department of Energy national laboratory.

Printed with renewable source ink on paper containing at least 50% wastepaper, including 20% postconsumer waste.

NREL/FS-520-24627