TOP SECRET

GUERRILLA SOLAR: The unauthorized placement of renewable energy on a utility grid.

PROFILE: 0021

DATE: June 2002
LOCATION: Spain
INSTALLER NAME: T-Sol/AICYCIA
OWNER NAME: Fundacio Terra
INTERCONNECTED UTILITY: Pecsa-Endesa
SYSTEM SIZE: 2,200 watts of PV
PERCENT OF ANNUAL LOAD: 50%
TIME IN SERVICE: 3-1/2 years

The headquarters of the Fundacio Terra (Terra Foundation, www.terrafoundation.org) is situated in the heart of the old town of Barcelona, Spain. It is an NGO working on environmental activism. We co-organize the worldwide annual meeting "Encuentro Solar," in Benicarlo, on the Mediterranean coast. Fundacio Terra also distributes a parabolic solar barbecue for gardens and terraces. This promotes solar cooking as a strategy to reduce carbon dioxide emissions, and to stop global desertification in nonindustrial countries.

The office of the foundation is situated in the top of an old building in Barcelona, where it is supposed that Picasso painted the famous picture "Les Demoiselles d'Avignon." The building was retrofitted for energy efficiency, using recycled materials. It was one of the first ecological building renovations done in Spain, and it incorporates a solar-electric array of 2.2 kW peak (kWp) on the terrace. This is connected to the main utility supply, to offset the energy use of the office.

The PV array was inaugurated by the mayor of Barcelona on January 25, 1999. This was just when the law on binding purchase of solar energy came into force in Spain, with a price of 35 cents per kWh. But when Fundacio Terra tried to legalize our installation, it was impossible because the legislation held private energy suppliers to the same administrative conditions as a nuclear power station. There are strict technical rules, and fiscal treatment is the same as for large energy producing companies. Due to this inequality, the foundation is contesting this law in the courts of Barcelona, and is waiting for a resolution.

As a measure of pressure, Fundacio Terra is still feeding the solar energy to the local utility grid. Since January 25, 1999, we have been producing and giving all the solar-electric production to the electricity supply of the city. On May 5, 2002, our array surpassed 7.5 MWh of production, with an overall savings of 2.1 metric tonnes of carbon dioxide.

At this moment, only a few solar-electric producers with less than 5 kWp are connected to the line who have accepted the burdensome conditions of the law. Fundacio Terra continues with its solitary battle against the administration so that the production of solar energy will be as easy as making coffee in a coffee machine. The solar power plant of Fundacio Terra will continue to be plugged into the sun as a solar guerrilla fighter.

Guerrilla Solar Defined

Energy is freely and democratically provided by Nature. This century’s monopolization of energy by utilities both public and private threatens the health of our environment. Solar guerrillas believe that clean renewable energy should be welcomed by utilities. But utilities and governments continue to put up unreasonable barriers to interconnection, pushing common citizens to solar civil disobedience.

Guerrilla systems do not endanger utility line workers (see HPP71, page 58). They share clean, renewable energy with others on the utility grid, and reduce the need for polluting generation plants. When interconnection for small-scale renewables becomes fair, simple, and easily accessible to all, there will be no more need for guerrilla action.

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