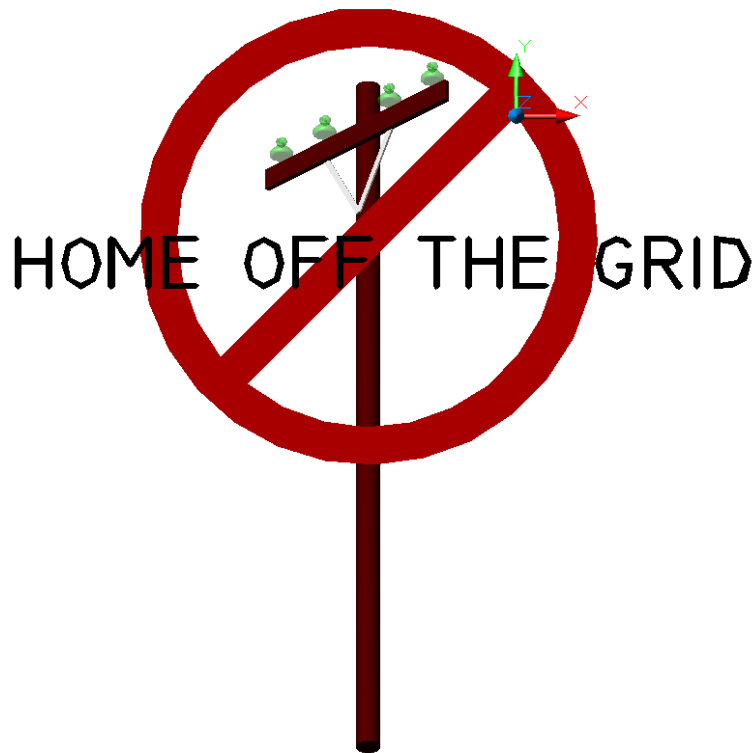


March 4, 2002



HOME OFF THE GRID

Summery

The purpose of “HOME OFF THE GRID” is the design of energy independent/self sufficient housing and community buildings for low-income people living where urban utilities and infrastructure do not exist. Examples of this are Native American Reservations and rural areas in 3rd world countries.

In wars involving the USA, the United States has often helped to rebuild the war torn countries. I hope

this will someday happen in Afghanistan. This is a good example of the purpose of these designs.

The designs (most often single-family dwellings) are to be built of native, or easily obtainable and inexpensive, materials. Structural design, techniques and tools will be “low tech” so that the buildings may be put up by unskilled labor and native methods with minimal guidance. The technology required to provide electrical power, heating, cooling, sanitation etc. will obviously be more complicated. In some cases, they must be state of the art (“high tech”) but all effort will be focused on integrating these systems so as to simplify (make user friendly) their operation.

Some examples of these technologies may include:

1. **Photovoltaic** (Solar Cells) Panels, which have dropped drastically in price in the last twenty years, as they are more widely used and cheaply mass-produced (especially in China).
2. **Wind Generators**
3. **Hydro Electric Generators** and **“Ram” Pumps**
4. **Solar Water Heating Systems**
5. Solar Powered **Composting Toilets** such as those which are now being used in US **National Park and recreational areas.**
6. **Tankless Water Heaters**

While one goal is to build as cheaply as possible, this is not meant to imply that the structures should be in any way shoddy, weak or ugly. Although simple and devoid of ornament, they will be engineered to last and easily incorporate native art and style so as to appear to be aesthetically consistent with the traditional architecture of the area and culture.

Included in the overall scope of the enterprise will be the investigation of other possibilities such as incorporation of [Hydroponic Farming and Gardening](#), [Methane Generation](#), [Composting](#) and other technologies to enable the people to be as self-sufficient as possible. Educational Programs will also be developed to enable at least a general understanding of it all.

The designs will be developed as [computer generated, virtual reality models](#), which can be “walked through” (like in video games) and will be presented in multiple languages, both on paper and in animated videocassettes and DVDs.

They will be available for viewing on the “HOME OFF THE GRID” web site.