

NET METERING

It seems that PREPA can't shoot straight: instead of shooting itself in the foot, it's hitting itself in the head.

According to the STAR article on February 25th by Jon Rust (*SWA eyes waste....*), PREPA has yet to allow "net metering" and "PREPA chief Jorge Rodriguez said a decision will be made by August 2008." This ridiculous delay is criminal. How can there be any justification for such inaction? Are the bureaucrats so out of touch with the people that pay their salaries that they can go blindly off to Neverland?

What is "net metering" and why do we care?

Net metering means that electricity can flow both directions (from the grid to the house or from the house to the grid) and the amounts are recorded. When electricity flows (normally) into a house from the grid, the meter advances. If a house is equipped with a solar or wind generation system, the excess power not being used by the house can be returned through the meter to the grid, and the meter runs "backwards" giving a credit. At the end of the month the resident pays for the net (from the grid minus from the home generation) amount used.

In almost all solar or wind generation systems, more electricity is generated than consumed at various times of the day. Solar systems convert sunlight into electricity in large quantities during the day and none at night. The cycle of electricity creation from wind systems is linked to wind patterns and is less predictable. The extra electricity being generated can be used in combination with batteries to store power for use at night and low wind periods, but it is far more efficient to give the extra power to the grid all day. Batteries are great for backup during outages, but they are expensive and have other environmental issues.

Who wants us to burn more oil needlessly? Who wants us to be oil dependent?

1. Oil companies.
2. Oil producing countries – including the Middle East.
3. Bureaucrats who receive booty from oil lobbyists.

What's wrong with burning oil?

1. It's the global warming, stupid!
2. It's creating pollution that is damaging the planet (the only one we have, the one we live on), destroying our health, our well being, and most especially, the development of our children.
3. It's running out; and it's going to get very, very expensive.
4. It's the cause of perverted alliances and insane wars.
5. It requires the shipment of many of our dollars to other countries, which hurts our balance of payments and actually funds enemies of freedom.

The use of alternative energy is not going to eliminate the burning of oil any time soon, but as these technologies are implemented and become ordinary, we reduce oil consumption and gain more experience that is folded back into the refinement of new systems. We take baby steps, but we at least start the march. Without some form of net

metering, the cost effectiveness for an alternative energy system is substantially lowered in urban and suburban areas.

Privately owned power companies are often times tied into their suppliers and make good profits with their contractual relationships, so they are not eager participants in alternative schemes. Citizen organizations have worked hard to pressure their governments to force the utility companies to allow net metering. As a result, according to the Interstate Renewable Energy Council, as of June '06, 40 states allow net metering for solar and 22 allow it for wind. PREPA is, unlike power companies in the States, a government bureaucracy and should be responsive to the will of the people. What possible excuse is there for not having net metering here and now?

There are issues that will need to be addressed:

1. The cost of PREPA electricity to the home includes the generation (let's say \$.07/KWH, or 40%) and distribution/operation/administration factors (let's say \$.10/KWH or 60%). The alternative energy system can be used to offset generation costs but may not fully offset the other costs to PREPA.
2. Reliable equipment to meter and regulate the power supplied to the grid by the home based system must be used.

In the case of the first issue, initially and for many years, the adverse revenue affect to PREPA would be miniscule. The rate at which people invest in the expensive equipment will be at a snail's pace. Secondly, since 40 states mandate these systems now, we know there is reliable equipment available for metering and regulation. As alternative energy becomes mainstream, perhaps a more sophisticated metering system reflecting different factors would be used.

There are other benefits to encouraging alternative energy sources distributed throughout the homes on our islands:

1. In the event of storms, emergencies, and blackouts, some percentage of the effected areas would have some level of backup.
2. Power supplied to the grid by a local household is utilized locally. That is, the electricity runs a very short distance to a neighbor and has much lower transmission losses than electricity traveling miles.
3. Afternoon alternative power generation reduces the need to use the most inefficient and expensive PREPA generators.

If we, The People, could make this decision on net metering directly, it would take but a few weeks, and it would have been made a few years ago. Why can't our civil servants get it? August of '08 to make a decision? Why don't we withhold their paychecks until net metering is implemented? These non decision makers are the enemies of our future health, and we're actually paying them. This is a total "no brainer".