Calendar

Power Roof

Solar Speech

powered camel," says
Randy Ames, who will give
a slide lecture about solar electricity at
the Escondido Public Library. "It shows
a Bedouin marching a camel through
the desert with a solar panel on its back,
behind the hump." The camel is
carrying medicine in a refrigeration
unit. "Ninety percent of the world's
solar power is used in outer space or in
remote rural villages," says Ames. "The
average city dweller never sees it. It's an
emerging technology. Everybody nods
when you mention the solar-powered

LOCAL

call boxes along the highway, but solar electric isn't commonplace in San Diego."

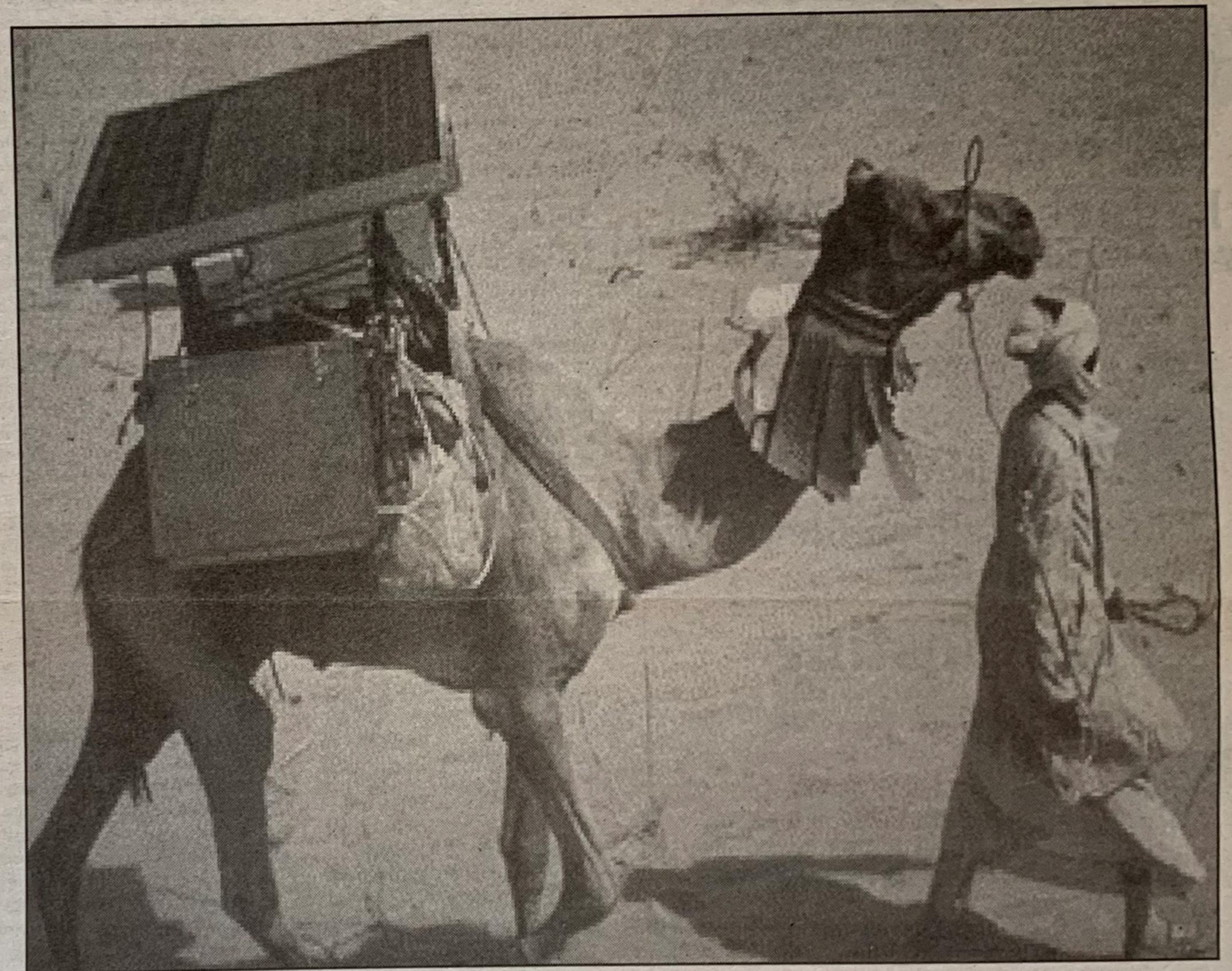
The sales manager for Maris
Company Electrical of Encinitas has
given this lecture at the library in the
past, to capacity crowds of 100. He
begins, he says, by outlining current
economic and political conditions.
Using government studies on the energy
crisis, he explains how we got where we
are today.

Does everybody get angry? "Well, it's interesting. They're relieved to hear there's an option. There's nothing more frustrating than feeling helpless. You think about turning on your airconditioner but don't know if you'll be billed at 15 cents a kilowatt or 25 cents. It's like Russian roulette. With solar electricity, you know what it costs to install; then you pay zero from that point forward."

What does installation cost these days? Has it become truly cheap? "It will be. In Sacramento there's \$54 million that the state needs to give away to people who want to put solar electric in their house right now. A week ago, the rebate was \$3000 per kilowatt installed; as of Monday, it's \$4500 per kilowatt installed. So you get a check back from the government for \$22,000 on the average solar installation."

Will Ames tell people at the lecture how to get that rebate money? "Absolutely."

And what is the average cost of an installation? "[After subtracting the rebate], we're talking about \$26,000. So the state pays darn near 50 percent of the total. We have a couple of loan reps coming to the lecture, to talk about financing the thing." According to his calculations, with a loan you can lock in a rate of about 15 cents per kilowatt hour. "Right now, it's 14.5 cents. So it's a break-even, with a fixed monthly payment, without an electric bill."



Solar-powered camel

These solar-electric systems run everything, including all appliances. They're not merely for heating water. "We're not plumbers," says Ames. And the systems are long-lived, because they don't have any moving parts. "It works like a diamond. There are no consumables, so there's no theoretical reason why it would stop working. What we're using is a rock — a silicon chip like what's in your computer. The rock has silver on both sides. One side's positive; the other's negative. And you just hook up a couple of wires to that, and the rock keeps making power. Theoretically, the wires might need replacing."

Your typical solar installation takes up 25 feet by 20 feet. Ames will show pictures of patio installations. More typically, the panels go on the southfacing roof, and he'll show slides of those, too. "You aren't really using your roof for anything else. You might as well use it to make electricity."

Businesses that install solar electrical systems will get an additional break, in the form of a 10 percent

federal tax credit in the first year, says Ames. "So if your tax bill is \$50,000 and you write off \$5000, and then you depreciate the unit over five years, you reduce costs even more."

Is there a downside? Ames mentions what he calls "administrative malarkey" — that is, "the grid tie-in system" and the metering contract that you must sign with San Diego Gas & Electric. You can't be off the meter completely, it seems. "You're still in the game."

What's more, you must contribute to the system against which you may not feel kindly these days. "On a sunny afternoon your electric meter will spin backwards, and you'll be making credit with SDG&E. Then when it's a dark, rainy afternoon, you'll use your credit, because it's energy you already contributed to the grid." This is also what you use at night, presumably. "At the end of the year, if you're behind, you pay them some money."

A check for any surplus you contribute won't be forthcoming. But if you balk at this arrangement, you're

"small-minded," says Ames. After all, it's for the good of the environment.

As if Californians need a reminder of the present system's instability, Ames concludes our conversation by referring again to the call boxes along the highway. "What you have to ask yourself is why an emergency system isn't tied into the 'dependable' city electrical system." He answers his own question: "Because it's not all that dependable! During a blackout, what good would it be?"

Says the ever-optimistic solar salesman Ames, "In an emergency the sun is going to shine and the system is going to work."

— Jeanne Schinto

"Solar Electricity for
Home or Business"
Tuesday, June 5, 6:30–8:30 p.m.
Escondido Public Library
239 South Kalmia
Escondido
Free
Reservations (recommended):
760-940-1760

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