

Examining the Amazing Free-Energy Claims of Dennis Lee

Hundreds of investors believed Dennis Lee's claim of a free-energy machine. A closer look is in order.

ERIC KRIEG

In September of 1996, I saw a full-page newspaper ad promising a demonstration of amazing technologies, including one that will make free electricity from the air. On the night of September 23, I and a few other members of the Philadelphia Association for Critical Thinking (PhACT) went to see this "amazing" technology for ourselves. The city hockey stadium had been rented out for the grand finale of a thirty-four-city tour. There was a feeling of excitement (dare I say electricity?) in the air. After a brief prayer huddle with assistants, Dennis Lee took the stage amidst thunderous applause.

Thus began a five-hour, nonstop demonstration of a whole array of curious machines in the middle of the arena. The charismatic Lee said he has been victimized by a massive international, multigenerational conspiracy to keep such

amazing technologies out of the marketplace. The audience gladly signed "declarations of energy independence" that boldly declared they would no longer accept governmental ... presentation focused more on his unique blend of patriot politics and religion than on proof of his claims. He claimed he couldn't make good on his advertised promise to demonstrate a wonderful radiation-neutralizing invention by Yull Brown. Apparently, he had inside knowledge that government agents had infiltrated the presentation, ready to make arrests. Lee claims to have invented the world's most efficient heat pump, but conspirators sabotaged his efforts, stole his company, and incarcerated him.

For about ten years, Lee has claimed that he can produce free energy from ambient heat by connecting his heat pump to a Fischer low-temperature phase-change machine. Not surprisingly, the audience warmed to the assertion that God had given Lee the final technical help to make this possible. (In Lee's literature, he quotes many of God's exciting revelations to him.) Unfortunately, Lee's only proof of this device was to have an audience member confirm that one part of the machine was hot. Each new bold pronouncement was interrupted by ecstatic applause. Lee promised that people paying \$10,000 to become dealers would be installing smaller versions of this machine in private homes across America before the end of the year. Since then, he has claimed that two thousand dealers signed up but that there will be a few delays. He seems not to have told his latest two thousand dealers that all but six of two thousand dealers of a similar effort years ago gave up on him.

Lee's elementary scientific dissertations were laced with errors: He claimed his special electricity-generating bricks would each put out one volt of energy. Volts are not units of energy. A brick exposed to acidic soil will generate voltage but at thousands of times less energy than required to light a respectable light bulb. He had a modified car engine powered by compressed gas which awed the audience by warping a fixed torque wrench. However, Lee mixed apples and oranges by referring to this torque with units of power (rather than mere force) and thus claimed his stalled engine to be more powerful than a truck engine (without explaining that the truck engine torque was rated at a high rpm level). We were also shown a perpetual-motion machine—which operated briefly and then stopped in perpetuity—and an undemonstrated small air turbine that supposedly puts out kilowatts of power in a three-mile-per-hour wind. Other technologies shown were just as underwhelming. The only truly amazing thing demonstrated to me was mass gullibility.

He collected applications from many audience members

Eric Krieg is an electrical engineer working as an independent engineering consultant at Kulicke and Soffa in Horsham, Pennsylvania. He is a founding member and on the executive council of the Philadelphia Association for Critical Thinking. He maintains a number of active Web pages and has recently assisted in a test of therapeutic touch along with James Randi. For more information on Eric Krieg's examination of the claims of Dennis Lee, see <http://www.voicenet.com/~eric/dennis.html>.

(myself included) to have their cars converted to run on little heated cylinders and for free-energy machines to be installed in homes with the excess power sold back to the nervous electric companies. Although my skeptical colleagues and I brought electrical measurement equipment and a geiger counter, we weren't allowed to use them. Nonetheless, I heard someone in the audience remark to a friend, "At least one of those inventions has got to make it big!" Finally, well past midnight, Lee got around to the inevitable—asking the remaining groggy spectators to pay \$10,000 to become dealers before the price shot up to \$25,000. In becoming a dealer, one waives the right to legal recourse.

The show inspired me to both study and challenge these claims. By the next morning, I had set up and started promoting a set of Internet Web pages (<http://www.voicenet.com/~eric/dennis.html>) dedicated to collecting and disseminating information concerning Lee's claims.

One of the first comments I received from believers was, "There must be a conspiracy to cover up Lee's claims because the mainstream media won't cover it." Ironically, that allegation has some truth to it. The media *don't* promote Lee's claims—but they don't debunk them either! Unfortunately, when the press ignores a conspiracy theory, it's just more evidence to believers that the conspiracy exists.

News of my nascent Web pages quickly traveled among the cyberspace free-energy and conspiracy communities. To the Lee investors concerned that I may be part of a government/big-oil/new-world-order conspiracy to defrock Lee, I responded with the same approach skeptic Philip J. Klass uses when accused of being a government agent: I created a Web page titled "Is Eric Krieg a Secret Agent of a Government Conspiracy?" I filled it up with references that anyone could follow to verify my independence and made an open offer for anyone to examine my unbroken record of pay stubs from high school to present. Roots as a born-again Christian seemed to buy me some credibility with Lee's followers. Throughout debates, I tried to keep shepherding people back to the primary issue: Does the free-energy machine work?

Lee and his people rebuffed my appeals to examine his machine. I then made an open offer to spend tens of thousands of dollars promoting his device among people with the experience and equipment to validate his machines if he would just let me verify it first. Lee simply told his army that they should pay no attention to me because I was the "enemy." He certainly didn't respond to inquiries such as, "How much does your company pay the power company and gas stations?" One of my more popular Web pages documents three hundred years of free-energy and perpetual-motion frauds. Lee's marketing approach seems to follow historical patterns, like focusing on theory and politics, targeting born-again-Christian farmers, avoiding demonstrations with engineers, and endlessly prevailing upon investors to be patient through delays caused by—you guessed it—the Big Conspiracy. The only conspiracy thwarting proof of Lee's machine seemed to be Lee's own refusal to allow open testing.

Apparently, pills that turn gas into water and 100-mpg car-

buretors have a Phoenix-like quality: After an "inventor" goes to jail or disappears prior to open demonstration, the next energy messiah refers to it as more proof of the conspiracy. I've identified a syndrome I call "buy-in mind lock." People who have invested only some investigation time see my Web pages and easily decide not to sign over a check. However, dealers who have invested money and started soliciting friends as customers are much less likely to change. Most won't answer my follow-up mail. For them, it must be very difficult to admit to circles of friends and family that they may have lost big. I expect it will be psychologically easier for Lee's dealers to borrow even more money to buy machines for installation than to cut their losses.

Apparently, I had intruded on a well-established free-energy society with its own lengthy periodicals, seminars, dutifully patient investors, and new claimants *du jour*. I received torrents of e-mail along the lines of, "OK, I'm convinced that Lee is full of it . . . but what about the new 'ACME' Energy Machine?" My full-time engineering job developing real products leaves insufficient time to investigate the many printed pounds of theory and rumor. So I openly offer a \$2,000 prize, a promise of mainstream publicity, and a \$1,000 finder's fee for demonstrated proof of a free-energy device. I borrowed many of my conditions from James Randi's analogous challenge. So far, there have been

many inquiries but no scheduled tests. I've cultivated a network of people who feed me information, including copies of Lee's newsletter to his investors. I discovered Lee offers commissions to bring in new dealers. Also, Lee has made a considerable effort to aid and recruit from the patriot movement. Dealers are greatly discouraged from communicating with one another. Many of his original, longer-suffering investors who've lost faith are bought out with newer investors' money. A lot of that investment money went to a large nationwide advertising effort to lure new contributors.

Although, as of this writing, Lee has yet to install free-energy machines in homes across America as promised earlier this year, he recently claimed he would openly demonstrate a machine by mid-year. He refers to his dealers as "millionaires" and claims that dealerships have sold for as high as \$100,000.

The *Utah Deseret News* (January 22 and February 16, 1993) reports that Lee was indicted for fraud in New Jersey in 1975, charged with fraud in the state of Washington in 1985, and pled guilty to two felony counts of consumer fraud in California in 1990 in connection with the sale of his energy-saving heat pump kit. Well, what the hell . . . they say Jim Bakker is planning a comeback, too.

Anyone still interested in becoming a dealer can contact Lee's company at P.O. Box 1406, McAfee NJ 07428. □

Are Heat Pumps the Key to Free Energy?

TOM NAPIER

The claim has been made that, since the electrical energy needed to run a domestic heat pump is about a sixth of the heat energy it puts out, one could convert some of this heat energy back into electrical form. This would generate enough power to run the heat pump and still leave some over to sell back to the utility company. In free-energy-speak the result would be an "over-unity" device. After all, if the heat pump is 600% efficient it looks as if the conversion back to electricity need only

be about 30% efficient to come out well ahead.

Since the early nineteenth century it has been known that the amount of heat energy in something, a gas, a liquid, or a solid, is proportional to its temperature, measured on the Kelvin scale. (Zero degrees Kelvin is -273.2°C or -459.8°F .) A liquid at the boiling point of water, 373°K , which cools to the freezing point of water, 273°K , still contains 73% ($273/373$) of its original heat energy. The 27% difference represents how much of its original heat energy was extracted as the liquid cooled.

In principle, an engine with its input maintained at boiling point and its output maintained at freezing point could convert all of this 27% of the input heat energy into useful mechanical energy. The remaining 73% of the input energy is carried away by the cold output and

can't be used. No engine running between these two temperatures can, even in theory, convert more than 27% of the input energy into output energy. Of course, any real engine will have a useful output of even less than 27%.

To get an electrical output, one drives a generator with the mechanical output of the heat engine. Luckily, generators are quite efficient so almost all of the available mechanical energy can be turned into electrical energy. The ideal heat engine is reversible, that is, if mechanical energy is put into it, it will output heat energy. A heat pump uses mechanical energy to move heat from a low temperature input to a high temperature output. The output heat energy is equal to the input heat energy plus the

Tom Napier is an electronics engineer with a B.S. in physics and an M.S. in electronics from Aberdeen University, Scotland. He is a member of the Philadelphia Association for Critical Thinking (PhACT) and frequently writes on skeptical topics.

HEAT PUMPS
continued on page 65