

How to Protect Your Family from The Shocking Electro-Pollution Cancer Risk Found in Most Homes

Host: Lloyd Burrell

Guest: Dave Stetzer, Power Expert

Lloyd:

Welcome, welcome, my name is Lloyd Burrell. I'm your host. Today I'm thrilled to have as my guest electrician and EMF expert Mr. Dave Stetzer. With a career spanning over 40 years, Dave Stetzer is widely regarded as one of the world's foremost authorities on what is commonly termed dirty electricity.

Mr. Dave Stetzer, welcome to the EMF Health Summit.

Dave:

Thank you.

Lloyd:

Thank you, sir. Thank you so much for being here. So, dirty electricity, the name kind of gives it away. But if you could explain to us what dirty electricity is and why it's important?

Dave:

OK. Well, actually, Professor Martin Graham who's a professor at UC Berkeley **had over 40 patents to his name**, and we discovered this back about 1997 – 1998, something like that. He wrote a white paper and he called it electrical pollution and another word was ubiquitous pollutant, meaning it's everywhere. Somewhere along the line, it

EMF Health Summit

evolved into dirty electricity. But basically, what it is is with modern day electronic devices, **we're turning things on and off really fast. So, we get a little arc, a little buzz as you go by your light switch and you turn it on real slow. So, we get what we call transients, high-frequency transients.** So, you really want a really nice, smooth, sinusoidal sine wave and what happens is you don't get it. It's being chopped up, turning on and off real fast gives you this little arc and things like that. So, you get these high frequency transients that are actually on the building's wires.

Lloyd:

OK. So, it's been around for quite a long time. Well, certainly as you're saying here, the research, we're talking about the 1970s. A few people are aware of this, agreed. I'm aware of it, you're aware of it, there are some people that are aware of it. But it's not mainstream by any means. So, my question is about the science if we could talk a little bit about that because there's quite a bit of science on this now. What studies are there and how strong is this science?

Dave:

Well, the science is very strong. The problem is, as you may say, you're right when you say people aren't aware of it because it isn't something you can see, taste, smell, touch, something like that. And actually, to see it you have to have expensive equipment. For example, we always use an oscilloscope and so, we always saw their waveforms back in the '70s with the oscilloscope. But the average person can't afford an oscilloscope and they're certainly not going to invest in one. You're not going to use it if you don't use it for a living, and they're around \$5,000. But if you take the oscilloscope, you can actually see and calculate this. Now, the Russians, they've done a lot more research on it than we have way back. First of all, **if**

you made the human body into an electrical model, it will look like three resistors and two capacitors. Basically, a capacitor is short to high frequency. So, when you get above

2 kHz - basically 2,000 Hz, 2,000 cycles per second - all that energy dissipates internal to the human body. So, the Russians have standards or already had standards in place. So, they're saying, "OK, look. It says 250V/m, you're allowed. It goes down to 25 if it goes above 2 kHz because there is 10 times more energy that's going internally." So, it does more damage. So, it's been around a long time. The science is there. Professor Magda Havas from Canada has done a lot of research on it. It's science if you want to show A causes B. If we can figure a way of removing A, and we can put A back, B goes away and comes back each time, we can do that. So, we figured out a way to do that. She's done a lot of research on it. Dr. Sam Milham who's a world-famous epidemiologist who's written books on dirty electricity; he's former head of the Health Department at Washington State. He's done a lot of research, lots of Russians have checked this up. Professor Yuri Grigoriev who they call the grandfather of electromagnetic radiation, Professor Nikitina Valentina, she's the grandmother of electromagnetic radiation. They're still active in research on this. Vitaly Reznik... the list goes on. So it's not something that's written up and published in the National Enquirer. It's published in medical journals. And I always tell people: maybe the Dalai Lama can change his blood sugar, for example, psychosomatically, but you and I can't. And we know if we change that dirty electricity number on the wall, for example, we can lower those blood sugar changes. Free-radical in the blood changes. These are numbers that can be plotted against numbers. pH in the saliva changes. The neurotransmitters can change. Urine, for example. All in a short time. Like, for blood sugar, in 20 minutes to an hour your blood sugar can change.

EMF Health Summit

Lloyd:

Yes. So, there's all this science, because we've actually spoken before on this subject. Some references that you've shared with me before, I didn't know about. These are actually what you gave me previously: A book by a gentleman called J. Patrick Riley called Electrical Stimulation and Electropathology and also a book called The Effects of Electric Shock on Man by Charles F. Dalziel. There is also a lot of research on your website.

Dave:

Yes, there is. Research on blood sugar, MS, a lot of research on MS, Havas has done some but other people also. Blood sugar, there are 22 million diagnosed diabetics. This is all numbers now but a few years ago, 22 million diagnosed diabetics in the United States alone. Why? When I went to school – and I'm old – and nobody in my class was diabetic. My sister and I were talking here one time a while ago and we think we had a great grandmother who said she was diabetic. And that's the only person we knew. **But now, it's like probably 25% of the population.**

Lloyd:

So, there are these sciences pointing to all these adverse biological effects which you just mentioned here: the effects on blood sugar, the effects on the neurotransmitters - notably the dopamine. So, there are these very clear, observable, and very statistically significant adverse biological effects to these exposures, which we call dirty electricity. These are the common terms but there are other terms to it like intermediary frequencies. But what we're talking about is electropollution. Very simply, this arcing which comes on electrical wires. So, my question is, in terms of the diseases, you mentioned diabetes, so what links – because it's an emerging research, of

EMF Health Summit

course, and it's an ongoing research. But what actual links, indications, or associations do we have of these exposures with disease?

Dave:

Well, Sam Milham, he's a world-famous epidemiologist, so he's probably got more credentials to answer that because I'm not a medical doctor. I'm the measurement guy. But he calls it the electrification of America. I think he wrote a book and he can show that cancer rates went up and, I think, New York City, Berlin and, London were the first cities to get electrified. **You can see how the cancer rates just spiked as soon as they did that.** Another thing was the rural electrification came through here – and I live in Wisconsin – in the '30s, '35, '36, some of these lines are still up. We're still using the same power lines, OK? So, what happened then in the south, **the blacks in the south were the last to get electrified, and diabetes was almost unheard of in their population.** And then, all of a sudden, they get electrified and they have just as much chance at getting diabetes as any other group of people after the lines went through. Milham is more of an epidemiologist and he can take you through it. Havas has done research, Milham, Genesis in Canada. There's a lot of research on it. The book you mentioned isn't for the average person, but, basically, what it says is **if above 2 kHz, the energy goes internal and it only takes like 60 microamps to stop a dog's heart and 80 microamps to stop a human heart.**

Lloyd:

Yes.

Dave:

That's pretty low levels there. 18 microamps is associated with cancer in numerous well-programmed studies. And that's by the National

EMF Health Summit

Institute of Health and Environmental Sciences. You can see it doesn't take very much to cause issues.

Lloyd:

And this is clearly a growing problem. You're talking about studies with Dr. Sam Milham and he's done some amazing work and it's a great little book that he wrote, *Dirty Electricity*. But there's so much work that he did, really, behind that and studies that he's done on populations and electricity. But it's a growing problem, is it not? More and more electrical devices are creating this problem. Could you just speak to that a little bit?

Dave:

EPRI, Electric Power Research Institute in Palo Alto, California, I think it was like 2005 or something like that, came out with a study. I may have that wrong. Maybe 1998. Anyway, it says, **70% of all the loads in 2002 were going to be non-linear loads. Non-linear loads are electronic loads.** This is growing faster and faster and faster. Even in our own homes, how many homes have computers and TVs? Hardly any of them don't. But now when we start to buy, like, a new furnace, for example, we get a variable speed frequency drive on it. If we live in the country, we get a variable speed frequency drive on our well pump, and variable speed frequency drive on our heat pumps and our air conditioners and things. **These are really bad because they chop up the sine waves really bad. They put a lot of high frequency transients back. And even if you don't have one and your neighbor does, it shows up in your house because it gets back on the grid.**

Lloyd:

And then, I'm thinking the switch mode power supplies also, more and more devices are fixed with that. Can you speak to that?

Dave:

Absolutely. See, all electronic equipment runs on DC current. So, you have to change the AC to DC. Now, your grandpa and your greatgrandfather had this radio and if you went over to their house or their T.V., if you look in there, you can see the vacuum tubes and you see a little filament, where the light lights up. **That's still a linear load because that's the same as lighting a light bulb. So, you have this filament and it boils electrons and creates the DC for us. Now, we use diodes, solid-state equipment. And the other thing is even lighting, energy-efficient lighting – and the government, one of the worst things that's come out of it are these compact fluorescent lights. They put between 50 kHz and 100 kHz back on –depending on the brand, wires, and things – on every wire in the house and in the neighborhood.** So, you can have a compact fluorescent light on at the end of the driveway on and night and you've got 50 kHz right there at the headboard of your bed. So, it's really growing fast. Years ago, you would never see this. In 1972, we had an oil embargo, so we had to get more energy efficient. So, we started using current in short pulses. For example, if you have a 60-Watt light bulb, it gives us so many lumens of light. So, we want to use less current and we want to pulse it, turn it on, turn it off, turn it on, turn it off, and still get the same amount of lumens, but less power. Well, what happens when turning on and off is this little arc, these high-frequency transients - of course it affects our health.

Lloyd:

Yes, it's clearly a growing problem. We're trying to save the planet – this is the irony of things – and yet, it seems we're killing ourselves at the same time, slowly killing ourselves at the same time. Is that an overstatement?

Dave:

That's right on the nutshell. **Wind, everybody thinks wind power is so great, right? And green. But it's not green.** What happens – probably the green is just hydro. **But if the wind's blowing 30mph and you want to produce electricity, what happens is with this wind is we produce AC current when it's blowing. The faster it blows, the more current it has. But it's not a constant voltage so we have to go ahead and put it back on the grid. So, what happens is we take the AC and we got to turn it to DC. So, then we have to go through a switchedmode power supply. That creates high frequencies.** Then we have to take the DC and run it through an inverter to put back on the grid. So that creates another high frequency. Now, that's kind of a doom and gloom but it gets delivered everywhere, see? You can take a tuned filter, and the Institute of Electric and Electronics engineers address this, but nobody wants to spend the money. You put a filter on there and clean that out. Same way with the computer industry. If you know your computer is putting 25 kHz back on the line, put a tuned filter for 25 kHz right on the computer itself or right on that switched-mode power supply. But yes, it's getting really bad. Green is not green, we're killing ourselves on this planet. Wind, solar - everybody's going solar - but your doctor bills are going to go up.

Lloyd:

Yes. We've got the same phenomenon here, this AC/DC inverter on the other end. All these fairly sophisticated electronics, which are great, give us power but they're very harmful. Potentially very harmful.

Dave:

Most solar, the ones that I've seen, I've measured hundreds of times, they're 20kHz. **It'll put 20,000 cycles right back onto every wire**

EMF Health Summit

in the whole area. And then, in North America, the lines were built for linear loads, OK? Not non-linear loads. So, the neutral wire, the primary neutral wire that takes the current back to the substation should be on the wire, but the wire isn't big enough. So, what happened in 1992 is **the Public Service Commission of most states allowed the utilities to drive a ground rod in every pole.** So, now what happened was the 1998 figures by two studies said that **70% of all the current that came out on the phase wires returned to the substation via the earth.** Where do you stand? On the earth. I mean, recently, last summer, Milham and I were investigating some things, where people were swimming in the lake and they touched the boat dock and were electrocuted and died. So, one in Alabama and I don't remember where the other ones were. So, it's the ground current. Solid current in the ground. And 70% - I know it's more than that now, it has to be.

Lloyd:

I'd like to come to that in a moment because that's a really important topic. But just to finish on the dirty electricity, if we can – the thing I want to stress here, for people that are listening just to emphasize this, you put a compact fluorescent light bulb out to light your drive, then that is putting that dirty electricity electropollution into your bedroom quite possibly, quite probably. **Dave:**

Without a doubt! Absolutely. You can go to your neighbors, we can take an oscilloscope, or a meter and we can plug it in at your house and we can call your neighbor and say, "Hey, where is your light dimmer switch?" and you can watch the meter change. And after a couple of times, you can tell them "OK, you have them have bright, you have them all the way bright." So, this is just like, "OK, I don't have any of this stuff at my house." For me – and I'm an electrical person, it's all I've ever done – this is a number one concern in this country for

EMF Health Summit

health, in my opinion. I mean, chickenpox, OK, you get a shot for it or whatever. But you know,

a lot of this stuff, unless you have it, unless you have MS, you're really not concerned about that. But this affects everywhere. There's nobody that it doesn't affect, number one. Number two, there's nobody that's not exposed to it. Nobody that I can think of.

Lloyd:

Yes. So that's the doom and gloom.

Dave:

Yes, it is.

Lloyd:

But the good news is there is a solution, and this is what you've been working on for a number of years with Dr. Martin Graham. And another thing is it's fairly easy to implement. It's such a great shame that most people don't know about it but that's why we're talking about it today. And it's not terribly expensive either. Not necessarily expensive, obviously, in terms of your health. And you've got questions like, "What price can I put on my health?" But yes, if you could just talk about this meter firstly, please, that you've developed and how that works.

Dave:

Yes, OK. Remember, at the beginning of the show, we started talking about oscilloscopes and they're about \$5,000. And when we went to Russia, I spent a lot of time in Russia and Kazakhstan and places like that because Russia actually made weapons with these frequencies. So, we needed to know what the most biologically active frequencies were. **And there's something called radio wave**

sickness/symptoms. And they're the exact same symptoms as chronic fatigue, fibromyalgia, ADD, ADHD, and things like that. So, the Russian Health Department said,

“Look, we can't afford to give everybody an oscilloscope.” Our sanitary station - which will be like our health departments. “We can't afford to give them oscilloscope, train them how to run it and stuff. Can you make us a meter that will measure just the high energy frequency that's on the building's wires?” So, I was like, “Well, I don't know if I can, but Martin Graham probably can,” and he did. And we tried different things and we made a meter. I got one laying here. It's simple. There's not even an on and off switch. You just plug it into the wire and you get this digital number that comes up. And of course, then we went to what we would call our Bureau of Standards there. **And remember the 2 kHz number, because that's where it goes internal. If you have a number that goes below 50 on this meter, for sure 2 kHz, even if it's 50, usually it's right around 2 kHz.** So, there could be some instances where it's not. But it's looking at the electrical energy that's on the building's wires, measuring DE/DT for the engineers, but how many times did those transients little voltage bites, how many times did it change in a given period? So, we built the meter. The average person can build it. It's like a little over \$100 or something like that. It retails, I think, for \$125 or something like that. So, you can afford it and they last for a long, long time. I mean, they don't really go bad.

Lloyd:

I was looking at mine actually; it's over 10 years old and it's still good.

Dave:

Yes. I think this is a newer one because the cord is still tied up. And it's just a digital meter. You plug it in and you get this number.

EMF Health Summit

Lloyd:

So, you get this number and it's a number in GS units. So just comment on the bridge between GS units – which nobody's ever heard of, not surprisingly unless you've studied this – and Kilohertz which most people are a little bit more familiar with. So how does that work?

Dave:

OK. So, what happened was when the Russians said, “We want to measure the high frequency energy that's on the building's wire,” everybody's heard of Ohm's Law and Kirchhoff's Law and things like that. But fewer people have heard of Planck's Law. Max Planck said that – he was a German physicist – **energy is proportional to frequency. The higher the frequency, the more energy.** That's how your microwave works. We don't have very much voltage, but you know, 120 V maybe only draws 10 amps, but we have a whole lot more energy there because we've increased the frequency. So, energy is proportional to frequency. We need to take the frequency part into the equation. It has to be a part of it. The higher the frequency, the more the energy. But we also need to look at the amplitude, the voltage. A 50-millivolt transient is going to have more energy than a 20-millivolt transient. Why? If the 20 is at a higher frequency, it could actually have more. So, what happened is we come up to this meter and it really is a measurement of energy. But electrical energy is usually measured in watts, kilowatts, or joules, for example. But this is not a watt and it's not a joule, but it's still a measurement of energy. So, this was being batted around for a long, long time. So, what happened is we met in maybe 2000, something like that, in San Francisco. We had physicists from around the world. We had electrical engineers, professors of engineering, things like that, and we had this big discussion. It got to be probably like 1

EMF Health Summit

o'clock so people were hungry or something and wanted to get the meeting over with. So finally, everyone agreed it was a measurement of energy, but it wasn't any of these Joules or something like that. So, an engineer got up. He was from China and he said, "Look, Ohm discovered Ohms. Why don't we call it after the guy who found it, Graham Stetzer? So, we'll call it a GS unit." So, everybody voted for it to be called a GS unit and everybody went to eat, I guess. But it is a true measurement of energy and there's been a lot of research done with it, published in peer-reviewed journals and, like I said, not the National Enquirer or something. **And it correlates, it means something. I mean, the higher that unit, the less milk production the cow will give. The less that unit, the more milk she gives.** And we can plot this on a chart. You can plot blood sugar on a chart. You can plot the pH of your saliva on a chart - the free radicals. You can plot the neurotransmitters, for example. And most of the research said if the number is below 35, this is where all these things happen, right? But in my opinion, if it's below 50, the same thing should happen, but that's my opinion. I'm not the doctor. I'm just looking at it from an engineering standpoint where if you're below 2 kHz, it's not going internal, so the same thing should happen. But below 35 is what the research says - they are the doctors, they were the professors, they did the research.

Lloyd:

OK. So, we're looking for, in your opinion, below 50 GS units? The research says below 35. I mean, when you use this unit, it flickers a bit. So, if you can get between, what, a low side of 50, that's pretty good. And again, and again and again, what's important is it's not the GS number, this Graham Stetzer unit number. It's the fact that this 50 corresponds to 2 kHz and we know; the studies tell us a 2 kHz and above that, we've got these adverse biological effects. So, my question is so you've got the meter which is really simple, you just

EMF Health Summit

plug the thing in and it gives you a number. And then you've got this number. What do you do after that, with the number? To put it in other words, what is your recommended protocol for mitigating dirty electricity in our home?

Dave:

OK. Well, again, this wasn't just a whim. We went to Russia for many trips and these guys didn't want to help me at all, an American. "What are you doing here? You want to make some money. We want to make money," and whatever. So, when I showed them what was on their building's wires – because they have computers and they have energy-efficient lights too – then they were like, "Oh my gosh!" So, then they went to help us. So, we developed the filter that tells us which frequencies were the most biologically active frequencies. Now, they're saying between 4 kHz and 100 kHz are the most biologically active. I've rarely seen anything above 100 kHz on the wires. But our filter was beyond that. We developed a filter that takes on between 2 kHz and 150 kHz. So, it's just a thing you plug in. I can hold it up here and you can see it. It's just two-prongs and you're plugging it upside down. That will short those high frequencies up. So, you've got to look at where it's coming from. There are two sources. One is it's going to be coming off the grid, because of your neighbors and everything. Now with smart meters, they put 50 kHz everywhere because they got to transmit so they have a DC circuit. And like your computers, your equipment inside your house, and your T.V.s, you want to put them on the T.V. and put them on your computer first because every time you plug one in somewhere, it lowers the numbers everywhere. So, we plug them in on the T.V. and places like that, you will use fewer filters. And then you just plug the meter in after that, you get a number, you plug the filter in and you want to see it drop significantly. And I define significant as 20%. If it's below 20%, you leave it. Go to the next

EMF Health Summit

outlet. You need to check every outlet, but you need one in every outlet. So then, the numbers will come down. The average home takes about 20. The average home has two T.V.s and one computer. So, if you have more, then you need a couple more and if you have less, then you probably don't need as many.

Lloyd:

OK, yes. Very clear. Just to resume, start off obviously by measuring. So, before that, if you identify certain electrical appliances which are causing significant dirty electricity, that's to say if you go to a certain room and you've got a very high reading and you're able to identify – because I actually had this situation in my home on an LED light above the shower. I was doing a video with my son and he put this switch on, the light switch on, and it shot to 1600 GS. And I never realized. We've had this light for years, ever since we moved in and it was just because we kind of switched this one – it's the light above the shower, so it's normally on like maybe 10 minutes when we're having a shower. But my question is before we put the filters on, can we not eliminate certain devices? In this case, I got the electrician in to replace that light. Is that not the thing to do, to eliminate, mitigate if we can, these devices which are causing this problem?

Dave:

Oh yes, absolutely. **Another thing is the light dimmer switches**, for example, they're really bad. It's like \$2.50 for a single-pull switch. So, you can change that up pretty fast and economically. And they're terrible. In the case like that light you're talking about, you say, "Yes, but I'm not in the shower that long," **but your skin is wet, and you remember that 2 kHz and then you're normally like 500 ohms of impedance, well, your impedance really goes down because you've got wet skin and that's going to couple right into your body right there in the shower.** So that was a good

EMF Health Summit

thing to get rid of. But LEDs, some of them are starting to get better now, but most of them are bad. But CFLs are definitely bad, and the bad part of the CFLs is that not only do they put between 50 to 100 kHz back on the wires, but they also radiate through space. And you can take like a 60 Watt – actually I can take an 11 Watt CFL and I can sit a foot away from it and

have 27 microamps in my body. The closer I get, the more. Now, 27 microamps are not much. But you haven't remembered that 60 stops a dog's heart and 80 a human's. And 18 microamps is associated with cancer. So, this stuff not only does it get on the wire, it comes through space. **The CFLs, they are really one of the most dangerous things they've come up with.**

Lloyd:

So that is internally, but what happens if you've got everything switched off in your home and imagine you've just got an empty shell. You've got nothing in it, a brand-new home, an empty shell and you put your GS meter in there and you've got like 500 GS units or whatever. So that means that the source of the problem is external, does it not? In which case, what can we do?

Dave:

OK, then you're right. That's what it would be. So now, we want to lower the numbers as we can. So, if you have to, in a worst-case scenario – and this happens maybe five out of a thousand homes, but we can't get it down, so you have to go to the panel, the main electrical panel because you know it's coming off the grid and you need to put what we call a nipple and put two of it. One fed from A phase, one fed from B phase. You have two hot phases coming into the house. You plug that in there and you put the filter right there, the little ones. Some people would say, "Why don't you build a whole house filter?"

EMF Health Summit

And we did. That was our first idea. Most whole house filters have a frequency response and they drop off at 25 kHz. So, **anything above 25 kHz still stays on the wire, number one. Number two, we did some research with the University of Wisconsin, Madison and took people with chronic fatigue, 20 out of 20 people. Ten people knew when it was on and when it was off for sure. Miraculous recovery when it was off. Seven people got better.** Three people couldn't

tell if it was on or off. But they were going to bed one hour earlier or two hours later at night and getting up an hour later in the morning. But then we said, "Why didn't 20 out of 20 people get better?" So, we had the whole house filtered. They didn't know it was a double blind. But there were two sources. One was coming off the grid, and then into your computer, it spills on all the wires until it gets over to the panel to get shorted out. Then we went back and looked at the waveforms and the people who didn't get better had a lot of electronic equipment in their house because they were sitting there - they were very ill and couldn't work and things like that. They had big screen T.V.s and things like that to pass the time. So now when we went back, we put filters in out and about the house. We had 20 out of 20 people got miraculous recoveries.

Lloyd:

Wow.

Lloyd:

You've got to go to the panel if it's external and you need the two filters on the panel. One for the A and one for the B phases. So, we can measure it. There is a solution, but what about the downsides? Because there is perhaps for instance, when you have wiring errors,

EMF Health Summit

what is the issue there exactly? Can we always use these filters are there certain caveats?

Dave:

You can always use the filters. Now, you'd have to define wiring error.

The electrical code says you have to have multiple circuits in a kitchen. So, a lot of times, **what electricians do to save money is, instead of running 12/2 with the group up to the top half of the outlet, then the bottom half gets another 12/2 with ground all the way. So, any current on the black wire cancels**

in the white wire so you don't get a big field. But what they'll do is they'll run like a 12-3 wire up there and they'll feed one top of one half of the outlet with one side of the breaker, another breaker for the bottom half but they'll share the neutral. So, people call that a wiring error. That's not a wiring error. That's a law abided code. **An error is for something wrong. It's not wrong and the filters, what happens is if you got an imbalanced load,** if you just put something in, like a light bulb to the top half of the outlet, that's fine. But if you plug something into the bottom-half, too, and you're running them both and they're not exactly the same amount of current, then you're going to have this big field and nothing to cancel it. So, what happens is when the filter's plugged in, it's the same as plugging a lamp or something, kind of. So, then you can get this big field but it's a 60-cycle field, then it doesn't really matter. That doesn't go internal. So, the wiring error thing is kind of a misconception. **There are times when something is wrong, but I would rather refer to that as a code violation. You can fix it, but it wouldn't make any difference if you've got a 60-Watt light bulb there or the filter.** And one thing that you should understand, the filter draws 0.9 amps of active power, not real power. There are two kinds of power. There is real

EMF Health Summit

power that really does something. The electrons moving through the wire, down the wire, go through and lights your light bulb, it really runs the motor. So, it's real power. Then there's something called a parent power or a reactive power. It's the same thing. What that is is the magnetizing current around the line. And you don't pay for that so when you plug the filters using amp, it draws current, yes, but you don't pay for it. It's reactive power that doesn't spin the needle. If anything, your electric bill should probably go down because all these other high-frequency transients and currents, what do they do? They cause meters to read inaccurately. And there's a lot of people out there who say, "Oh, put this filter in. it'll save energy. It's energy-savers." No, no, there are 746 Watts in a horsepower. You can't change that. So, any engineering handbook you pick up, it says it causes any meter to read inaccurately. Even medical instruments will read inaccurately from these highfrequency transients, and that's kind of bad. So, what happens, you put the filters in, you take out the transients, then the meter doesn't count many zero crossings, so they read more accurate.

Lloyd:

Good to know. So just to finish off on the dirty electricity, and then we're going to talk a little bit about the stray voltage which you mentioned earlier. There is your solution which is the first solution because you did the research, went to Russia and you really developed this. You were the first to develop this. There are other companies that offer similar solutions now. And then there are companies that offer what's called an in-line solution now. So, do you have any comments on that as a solution to this issue?

Dave:

Well, actually, if I want brain surgery done, I don't want to go down to the local mechanic. And Graham, he had over 40 patents on his name.

EMF Health Summit

Punch his name in on the internet and you're going to get thousands of hits. There would be no Ethernet if it wasn't for him. He developed the guidance system for the ICBMs, all this stuff. So, Martin Graham; electrical is all he's ever done. It's all I've ever done. So, we did the research, we're the measurement experts, things like that. A few years ago, a guy invited me to go to California and he said, "I'd like to be a distributor for your filter. I have sort of like an Amway network or pyramid business-type thing. Could you come out and show me how they work?" So, I did, I took them out there, went out there. I'm from Wisconsin, the Midwest. A man's word is as good as his signature. So, I went out there and what he did is he bought a box of filters and he

asked me all kinds of questions and I told him the answers, like I felt I should. If you're going to have one product, you certainly should be able to answer some questions. **So, he takes a hammer, knocks them apart, takes it to China and makes a knockoff.** And we have patents on the meter and the circuits. Originally, he was buying our meter and taking the circuit board out and putting a different case on it. So, we kind of had to stop him from that. So, there are knockoffs out there. The people that are doing this really, quite frankly, are people trying to make a buck off somebody else's hard work. That's the bottom-line. If people send me emails, I spend most of my day answering emails or on the phone answering questions. These other people, they're headhunters. They find other people jobs. What's that got to do with electricity? I'm not going to find anybody a job, so I don't dabble in it. I don't dabble. I'm an expert in electricity and it's onestop shopping. If I can't answer your question, I'll find somebody who will.

Lloyd:

OK, good. So, buyers, beware of that. So, let's talk about this stray electricity, stray voltage. Again, we've got lots of different terms for it. So yes, you mentioned it earlier, and it seems to be a particular problem in the U.S., less of a problem in Europe. But basically, the problem is that the utilities, since what was it? You'll tell me. But anyway, the utility companies have been rerouting the neutral - the return - path via the earth. Is that basically what we're talking about here?

Dave:

Yes, you've really done your research, I have to say.

Lloyd:

Last time, you explained it to me!

Dave:

You absorbed it like a sponge, I'm really impressed. OK, what happened, again, is **when we built the electrical grid, we have three hot wires. We'll call them A, B and C. So, if you have 20 amps on A and 20 amps on B and 20 amps on C, they actually oscillate between each other. So, there's no neutral current. So, if you have 20 amps on A and 20 amps on B and 27 amps on C for example, you will have 7 amps in that neutral wire**, the bottom wire. If you drive down the road, you see three hot wires and you see the bottom wire. **So that's what the linear load is.** There's a formula and it's a vector for how much currents in a neutral. So, a lot of times, they didn't even put the same size wire on for the neutral as they did for the phase wire. So, now, what happens, fast-forward to 1972 where there's this oil embargo. So now we start drawing current in short pulses in different manners. Variable speed

EMF Health Summit

frequency drives, energyefficient lights, all these things came on. And then the diode came in the late 60s, so now we had switched-mode power supplies, enter the vacuum tubes, integrated circuits. So, we started getting more, what we call, non-linear loads. **Now, using the same scenario, you have 20 amps on A and 20 amps on B and 20 amps on C, the neutral current will calculate the 42 amps. It's twice the amount, 225%. Actually, the theoretical is 1.743 times the phase conductor. But that's an absolute zero and in the vacuum, so that doesn't exist. So, in reality, it's 225%.** So, the electrical companies had their choice. They can go ahead and put up a bigger wire to handle it, or they could go ahead and put up another wire to handle it, or a cheaper method was to put the current to the ground. So, they drove a ground wire in every pole, they lobbied the Public Service Commissions, and they allowed them to do it. The Public Service Commissioners, that's again, like you want to go up to the brain surgeon and get the brain surgery done. **They're appointed by the Governor, so they probably don't know electron from a ground rod.** So, they allowed this in almost all the states, right? So now, **70% of all the current in 1998 that went on the phase wires returns back.** Now, the term **stray voltage is a term that I don't like because voltage doesn't stray.** It's governed by the laws of physics. It goes where people put it. So, the electrical utilities decided to put it in the ground. So, what happens is if it's stray dog or stray cat, stray dog bites you, you're going to have to pay for those stitches yourself.

But if the dog's got a collar on and you know who's dog it is.

Whatever the name and address are there, guess who pays for the stitches? So, the utilities call it stray because, "Uh, who's responsible for it?" That's why they like that term. **It's ground current and that's what it is.** I mean, if you have 10 houses on one side of the street and 10 on another and it couples there, and they all have a sewer pipe that goes into this main

EMF Health Summit

20-inch pipe, and the sewerage pipes gets outdated when these people have 10 kids and they're washing clothes and flushing their toilets more, all of a sudden, the sewage starts bubbling up in people's basement. They don't cause stray sewage. And how do you fix it? You put a bigger pipe in, right? Or you put another pipe in. But there's another way you can fix it. You can go ahead and walk in the street and drill holes in that pipe, and the sewage will bubble up and run down the street. Now, we wouldn't call it stray sewage, but that's what they did with the electrical utilities. **They drove ground rod in all the poles so it's sucking that wire off. In North America, we use a grounded Wye system, and then it still has to get back to the substation. The only problem is it has multiple roads back, through our homes, through our pipes, through our bodies, through our cows, our animals, kids. Lloyd:**

So, this electricity is, there's no doubt about it, in our ground, we can observe it. Other researchers have observed it. Dr. Magda Havas, I believe, has also done research on this. Dr. Sam Milham also. So, if you could just speak to that a little bit, the research. OK, the electricity is there, but so what? How dangerous is it?

Dave:

Well, I think it's very dangerous. I mean, if you read the reports – the high frequency stuff is very dangerous. I've read thousands of documents on it. Dr. Neil Cherry who was commissioned by the European Parliament to do a review on the literature, read hundreds of published peer-reviewed documents, sites them from around the world, universities everywhere that this does causes problems. **It causes any lists of symptoms from chronic fatigue, fibromyalgia, ADD, ADHD, all these made-up diseases of the '80s and '90s, that have no known causes and no known cures. Well, if we remove these high frequencies from their**

environment, without incident, these people get rid of that. It all goes away.

Lloyd:

Right, and there are, as I understand, some very clear studies on animals, mainly cows because, as we say, animals don't lie. Can you just speak to that?

Dave:

Yes. We did research on milk production. We have over 30,000 cows on film and it shows that levels as low as 10 millivolts will cause a cow to kick their milker off and everything. So, **they are hundreds of times less than what the government is saying is fine.** And we look at daily milk production of cow, and we looked at it for some 500 days. It's a study written up by Donald Hillman, a dairy science professor. I think there were three dairy science professors on there. Graham was on the paper. All credentialed people, published in peer-reviewed journal. And when you make a chart –

we had a computer and had to write this program that counts how many times a cow got shocked that day. How many transients did it get exposed to. And then we looked at how much milk it produced. **There's a 96.5% correlation between the dirty electricity on the wire, the transients, and the cow's daily milk production.** And we didn't do it on one farm, we did it on like five farms in a row. On the day that your milk production went up, so did mine. On the day mine went down, so did yours. The only two things that the people had in common was the weather and the electrical grid.

Lloyd:

But that's dirty electricity affecting the cows. What about stray voltage?

EMF Health Summit

Dave:

What happens is that when we have dirty electricity, that's the problem.

You get the dirty electricity. They're high frequency transients that gets out to the transformer. And then it gets onto the utility system. It's like sewage, doesn't matter if it's just you and your wife, or you, your wife and your kids and everybody else. When you flush the toilet, once it gets out to the main pipe, it's no longer your responsibility, you understand? So, if you have good wiring in your home and everything, the electrons get back out and cross the transformer to get to the primary circuit, the electric utilities, we're back on the grid now. They need to supply a wire big enough to take that current back to the substation. But they don't. They put it in the ground. What they did is they went out to the streets and start digging out, putting the big pipe in, they drove the holes. So, the dirty electricity is what causes that wire to become overloaded. If we went back to the loads of the '30s, '40s or the '50s, we wouldn't have those ground currents. It would be very little.

Lloyd:

So, these two phenomena are linked.

Dave:

One caused the other. So now, because we plugged that, even the good clean water from your kitchen faucet is coming up. So now, even the good, clean, 60-cycle – which there isn't even anymore – is getting out and spewing out all over the earth.

Lloyd:

So, we're overloading. With all these new devices, these energy-saving devices, everybody's understandably keen to save the planet and do a good thing. 9 times out of 10, nearly almost, we're creating a dirty

EMF Health Summit

electricity problem. And then in North America where we have this particular situation of the neutrals going back into the earth, we're also creating a stray voltage or we're creating this AC current which is in the earth. Which leads me to this question, I want to ask you about this phenomenon which is called earthing. So, earthing, going barefoot and all different ways of connecting with this so-called beneficial energy of the earth. Because the earth has – I'm sure you've observed this – its natural DC electron supplied flow and charged voltage. So, there is this natural DC voltage in the earth. So, what's your view on that? Because obviously, there is certainly some sense on this earthing question and there are a number of people who are for it. Certainly, there is anecdotal evidence that earthing is beneficial. What is your take on this?

Dave:

OK. I have the measurements to prove it. **The earthing thing originally started in Europe. And Europe uses an open Delta system. They do not use a grounded Wye system.** So, the current that came out of the substation on a wire only has one way back on a wire. So, the ground is zero potential, you could say. So

now, if you work on a computer all day, sit under fluorescent lighting, all these things, you will build up a charge in your body. **There's actually an oscillation in your body. We can measure it.** So, if you lay on a conductive surface or stand on a conductive surface, you will discharge. Now, whether it is connected to the earth or not, doesn't make any difference. You can pay \$150 to buy this earthing blanket - or whatever it costs - and you're going to plug it in. In Europe, you're going to get some benefit because you're discharging. If you didn't plug it in in North America, you would discharge. But you can also just stand on a piece of an aluminum foil that you can go to Walmart and buy. For \$20 you can probably buy

EMF Health Summit

10 years supply and just stand on that, you'll do the same thing. You'll discharge. But in North America, if you connect yourself to the ground, you need to get a voltmeter first and touch one lead to the mat and the other to where you're going to connect the wire and you will not connect yourself to the ground. Remember, in 1998, 70% of all the current that went on to phase wires returned via the earth. And if you use the ground plug, you know, the round plug on your outlet, that wire goes back to the service panel. There, it's a direct connection right out to the primary neutral to the power line. So, if you climb up the power line, connect the wire to the bottom wire, bring it down into your house, hook it to a conductive surface and lay on it, that's exactly what you're doing when you plug that wire in. So, in North America, no. Is it good to discharge? Yes. So, if you've bought the blanket, try it without plugging it in and you'll feel a lot better.

Lloyd:

OK. So, practical question. To deal with dirty electricity, and to deal with stray voltage, can we, in the bedroom and in the surrounding circuits, flip the breaker switch to eliminate this dirty electricity and stray voltage?

Dave:

OK, so flip off the breaker switch, you're only killing one circuit.

That's the hot wire. There's a neutral and there's a ground that's still there. So, the dirty part is still going to be there, OK? And when we use the filter, we're taking it off the hot wire and we're putting it onto the neutral. Or we're taking off the neutral and putting it on the hot because we short it right across. So, the black wire, which is the hot, and the neutral are always 180 degrees out of phase with each other. So, if you put plus 50 something millivolts and you put it over to a negative signal, you get negative 50 millivolts. So, what's +50 -

50? Zero. **You get better results with the filter. But if you're more comfortable turning the breaker off, fine. But then it's a mess. You've got to go down, turn it on, turn it off. But you still won't break the ground. You can't filter the ground.**

Lloyd:

So, we still have this stray voltage through the ground? We still got this electric field from this stray voltage, that's what you're saying.

Dave:

From the earth, yes.

Lloyd:

Yes. OK, great. Great information. Anything else that you would like to share with the viewers here?

Dave:

Well, I think if you go to **Stetzerelectric.com**, you'll find a lot of these papers, published peer-reviewed journals. If somebody has a question, they can call. I mean, I may not get back to you right away but I'm going to get back to you. There's nobody that I haven't returned the calls to. And email, I always answer my emails. So, if you have any questions, you can call and find out, as

long as it's about electricity. And the number on the GS meters mean something. Milham did some research at a school in California. **If that number's above 2,000 and you're working in that environment 6 hours a day for 180 days a year, you've increased your chance to get cancer by 25%. If the number's above 1,000, you've increased your chances by 15%.** So, the numbers mean something. I didn't do the research, but they actually mean

EMF Health Summit

something. So, you want to get those numbers down as best as you can.

Lloyd:

Yes, which is important. I'm glad you said that because cancer is an important subject and it's an emotionally-charged subject. And there's a link with cancer and this phenomenon we call dirty electricity. Dave, listen, thanks so much for being part of this health summit, sharing this amazing information, but also for all your contribution over the years because you've been at this a long time. On your website, it says since 1974. So, it's very impressive, the work you've done, you know, in bringing this and sharing this to the wider population and helping people. I'm sure you've helped so many people improve their lives. You really are truly a pioneer on this.

Dave:

Well, thanks. I'm an electrical expert. I wish I were a marketer and if I were, everybody would know about it. But it's people like you that actually deserve the credit because if this is an engineering problem, then I can talk engineering solution to an engineering problem. But neither Graham or myself are marketers and we have the best thing in the world and now other people are trying to make knockoffs if it. But if they can't, then they're still not doing it right. And I feel like subsidizing my competition because we've invested so much in it. I mean, we made the trips to Russia and nobody paid us and things like that. But there are guys like you. So, people hear your podcast, and then they try, and they get better. So, then they tell their cousins, uncles, brothers or whatever. I do a lot of interviews and I have to say, there's Patrick Timpone out of Texas and you. You impressed me, you went to the top of the list.

EMF Health Summit

Lloyd:

Thank you.

Dave:

You really did it and I'm just saying it.

Lloyd:

Thank you, sir. And also, for everybody who's joined us today. Thank you for being a part of this movement. Stay tuned for the next session.

Thank you, bye-bye. Take care, bye-bye.

EMF Health Summit

Copyright © MMXVIII ElectricSense

All Rights Reserved

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the written permission of the publisher. The publisher shall not be responsible for errors or omissions.

Publisher Disclaimer

This book is intended as a reference volume only, not as a medical manual. The ideas, procedures and suggestions contained herein are not intended as a substitute for consulting with your personal medical practitioner. Neither the publisher nor the author shall be liable for any loss or damage allegedly arising from any information or suggestions in this book, howsoever applied or misapplied. Further, if you have a medical problem, we urge you to seek advice from a licensed medical practitioner.