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Thread: Alternators, Free Energy, Perpetual Motion, Over Unity and all that...
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#2482
Today, 10:11 AM

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Posts: 4

Junior Member

Re: Alternators, Free Energy, Perpetual Motion, Over Unity and all that...

Reactance is our Friend

Someone's gonna wanna complain that "You can't get more from less", or worse: "You can't get something from nothing".

Well, to forestall their complaints, I'm gonna answer them right now and save them a bit of trouble going to the bother....

That last one is true. But I don't go there.

The first one is true for energy, but not true for reactance of energy. Here's why...

We use a couple of relations: the continuity of electricity (which is closely similar to conservation of energy) and current division.

The continuity of electricity is something we're familiar with: if frequency goes up, amplitude goes down. Or, if voltage goes up, current goes down. So that, overall, the entirety of electricity remains consistent with itself over time despite any changes to any of its particulars. So far, so good...

With current division, we know that if we add another branch load in parallel to any other branch loads, the current demanded of the lone voltage source goes up. In fact, we drain away the amp-hours of the voltage source that much faster with every additional parallel load of current branch added to a circuit supplied by a single voltage source. This is true for energy, but not true for reactance.

The opposite is true for reactance. Here's why...

As I cited in a previous post, reactance formulates a relationship among several factors: frequency, two times pi, and either capacitance paired with negative resistance or inductance paired with positive

resistance. And negative resistance is derived from Mho's Law in which resistance divided by voltage gives negative current while positive resistance is derived from Ohm's Law in which voltage is divided by resistance giving a relationship with current which we are familiar with.

Hence, if I fly into a head-wind, this positive resistance slows me down. But if I fly a plane with a tail-wind, the opposite happens: I speed up. I suspect it's a little different with electricity in that it's not a tail-wind so much as it may be a vacuum appearing ahead of the current. So, I suspect there are two varieties of voltage: one related to pressure and positive resistance and another related to a vacuum and negative resistance.

Anyway...

The continuity of electricity demands a consistency to the overall result of reactance despite any changes to any of its individual factors. So, if frequency should go up, then resistance must go down, or else inductance or capacitance must reduce so that the total reactance is conserved. See how continuity is indelibly linked to conservation?

But this works in our favor if we are attempting to magnify electricity through a step-wise procedure of nearly splitting electricity (without splitting the atomic matter which is hosting electricity), increasing this lossless power, and then converting reactance back into usable electricity.

This is due to the law of continuity and its implication of conservation of all things! We get conservation to make possible the increase of energy OUT compared to what goes IN to a circuit! What a concept!!

In order to maintain continuity of reactance, if frequency should go up, then resistance must go down. If this is positive resistance inside a coil, then the consequence will be that current must go up. But since reactance is lossless due to its exclusive quality of recycling, more current is not drained from the source. Instead, more current recirculates in the circuit since it's not going anywhere, nor is it being drained from anywhere. It can't drain anything, because it's lossless. Only energy could drain a source. Reactance can't drain any voltage source of its amp-hours. All it can do is zip around like light beams bouncing around inside of a laser device.

So, the current keeps going up along with its frequency and the voltage will go down as a consequence of the lowering of resistance and also to keep consistent with the increase of current -- everything being conserved, overall.

Meanwhile...

In order to maintain continuity of reactance, if frequency should go up, then negative resistance must go down resulting in a rise of voltage (since a decrease of negative resistance is equivalent to an increase of positive resistance). If this is negative resistance inside a capacitor, then the consequence will be that current must go down and voltage must go up. But since reactance is lossless due to its recycling, less current is not drained from the source. Instead, less current recirculates in the circuit since it's not going anywhere, nor is it being drained from anywhere. Instead, voltage goes up with the increase of frequency.

I suspect a condition of reactant inductance occurs within each self-looped set of two or more current coils since their current goes up while their voltage goes down due to their lack of windings giving far less surface area and less capacitance among their windings allowing their weak self-induction to flourish without being superseded by what would otherwise have been the capacitance of a massively wound coil.

And I also suspect a condition of capacitant reactance occurs among the two or more parallel-connected voltage coils since their voltage goes up while their current goes down. I suspect this capacitant reactance is due to the voltage coils possessing a significant level of capacitance among their windings.

We consider this to be standard behavior on either side of a step-up, or step-down, transformer. But this circuit exclusively possesses neither a step-up transformer, nor does it exclusively possess a step-down transformer, since we're not dealing with energy transfer moving in merely one direction from a source to a load. Instead, reactance is constantly being fed back and forth in both directions in a condition of the recycling of lossless power.

The weak ten percent coupling between the transfer coil and the voltage coils seems to favor the relationships described above along with the overall reversal of voltage polarity also contributing to this situation.

The reversal of voltage polarity seems to occur at the bottom of this circuit at the pair of capacitors being force-fed D/C current without any opportunity to discharge their buildup of voltage. What I think happens is that these capacitors (and the weak capacitance of the transformer sandwiched between them) retaliates by discharging a current-free signal of voltage whenever the four diodes are forcing them to accept voltage when they've already become saturated. This currentless discharge of a mere signal of voltage is in direct opposition to the phase relation of voltage being force-fed into them and at a slightly higher frequency. This is what instigates a rise of frequency in this circuit while the five coils at the top of the circuit amplify this "stressed" condition giving an eventual abundance of reactance stretching towards infinity if not cutoff by the periodic firing of the spark gap.

Whenever I zoom in for a closer look at the waveforms, I see a triangular wave appearing riding piggy back on top of the sine wave input. This triangular wave grows in amplitude -- and in frequency as well -- quickly dwarfing the amplitude of its carrier sine wave. So, instead of a wavy sine wave whose peaks and troughs are stable, we get a smooth hyperbolic arch bending upwards towards infinity as the oscilloscope tracing of the simulator stands further and further away from this in order to "take it all in".

At some point, the spark gap on the left kicks in acting as a resistive load for a split second putting back together the fragmented reactant waves of current and voltage which this circuit has been separating by 180 degrees of phase relation amounting to a one-half cycle of an A/C cycle of separation. This momentary departure from reactance serves to collapse this hyperbolic surge to a very low value of nano- or femto- units of measurement of power only to be superseded by another rising surge quickly escalating towards infinity. And this cycle of repetitive surges and collapses occurs 6k times a second in this particular circuit. Every variation of this circuit modifies the frequency of this cyclic occurrence to one degree or another.

So, for a 20% to 30% duty cycle of D/C output, I don't think a D/C to A/C sine wave inverter would mind too much, do you? Since it's accustomed to outputting a sine wave of 60 Hz while mine is hiccuping a D/C input at a rate of 100 times faster! This is what would happen if I position an actual build of this circuit simulation behind the battery pack of an EV sending this through, or partly in parallel across, a pack of dead batteries and then onward to the car's sine wave inverter before it reaches the twin A/C motors of a RAV4EV from 2002.

Last edited by Oliver Heaviside; Today at 10:18 AM.


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