

Re: details of what is happening with A/C electricity

Source: <http://sci.tech-archive.net/Archive/sci.physics.research/2007-03/msg00115.html>

- *From:* bz <bz+ser@xxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Wed, 28 Mar 2007 18:00:17 +0000 (UTC)
-

"robert bristow-johnson" <rbj@xxxxxxxxxxxxxxxxxxxxxx> wrote in
<news:1174353923.551452.230800@xxxxxxxxxxxxxxxxxxxxxx>:

On Mar 17, 8:32 am, bz <bz+...@xxxxxxxxxxxxxxxxxxxxxx> wrote:

paulaireilly <paulairei...@xxxxxxxxxx> wrote in
<news:1173233930.410368.318220@j27g2000cwj.googlegroups.com>:

If you try to think of capacitors and inductors, the analogies start to break down, but very roughly, something like water towers act like capacitors, and momentum of water acts a bit like inductance,

A chamber with a flexible diaphragm blocking 'through flow' while allowing pulses to pass is an analogy for a capacitor.

The water tower or a 'water hammer suppressor' like device is an inductor.

i don't think so. i would say that water towers are the hydrological analog of a DC battery. the (dual ported) chamber with a flexible diaphragm is a good analog of a capacitor (or one with a spring loaded piston). probably the only analog of an inductor that i can think of is a chamber filled with fan-blades or propellers that are all connected to flywheels. the momentum of the flywheels will resist changes in the current flow as what happens in inductors. a pipe with obstructions (screens, gravel, etc) that causes turbulence would be a the hydrological analog of a resistor. a diode would be modeled as a pipe with a "check valve" (one-way valve), a transistor or amplifier would be modeled with more difficulty.

Re: details of what is happening with A/C electricity

Transistors are actually easy to model as fluidic amplifiers.
<http://en.wikipedia.org/wiki/Fluidics>

r b-j

—
bz 73 de N5BZ k

please pardon my infinite ignorance, the set-of-things-I-do-not-know is an infinite set.

bz+ser@xxxxxxxxxxxxxxxxxxxxx remove ch100-5 to avoid spam trap

.