We claim:

1. A circuit for generating electrical energy, comprising:

a pulse generator for generating a continuous stream of pulses;

a ~~conductor~~ capacitor coupled to the pulse generator ~~that is configured to cool in response to the continuous stream of pulses~~;

~~a heat source placed adjacent~~ a tube having a cavity therein coupled to the ~~conductor~~capacitor; ~~and~~

an output for receiving an electrical output emitted from the ~~conductor~~tube; and

at least one oscillator component coupled to the tube, wherein the oscillator component includes an inductor coupled to one end of the tube and the capacitor.

~~2. The circuit of claim 1, wherein the conductor is a tube.~~

~~3~~2. The circuit of claim ~~2~~1, wherein the tube is filled with material having a predetermined permittivity or permeability larger than a vacuum.

~~4~~3. The circuit of claim ~~2~~1, further including a pump for pumping fluid through the tube.

~~5~~4. The circuit of claim ~~4~~3, wherein the fluid exchanges heat with the tube ~~and the heat source supplies heat to the fluid~~.

~~6~~5. The circuit of claim 1, wherein the ~~conductor is a~~ tube ~~having a~~ cavity ~~therein with~~has a semiconductor or metal at least partially filling the cavity.

~~7~~6. The circuit of claim 1, wherein the ~~heat source receives heat from a photovoltaic surface~~tube has a cross-section that is one of the following: round, square, rectangular, elliptical or oval.

~~8~~7. The circuit of claim 1, ~~wherein the heat source receives heat from a nuclear reactor pile~~further including a negative resistance coupled in series with the capacitor.

~~9~~8. A method for generating electrical energy, comprising:

generating a continuous input stream of pulses;

applying the input stream of pulses to a ~~conductor that receives heat from a heat source, wherein the input stream of pulses cools the conductor~~tube having a cavity therein, wherein the tube is filled with material having a predetermined permittivity or permeability larger than a vacuum; and

outputting an electrical signal from the ~~conductor~~tube, wherein the continuous stream of pulses is at a first frequency and further including generating a signal at a second frequency greater than the first frequency using an oscillator circuit coupled to the tube..

~~10~~9. The method of claim ~~9~~8, further including transmitting the continuous input stream of pulses through a negative resistance.

~~11~~10. The method of claim ~~9~~8, wherein the ~~conductor is a~~ tube ~~having a cavity therein~~has a cross-section that is one of the following: an N-sided polygon, round, elliptical or oval.

~~12~~11. The method of claim ~~9~~8, wherein the ~~heat source is a photovoltaic surface~~tube is an elongated cylinder.

~~13. The method of claim 9, wherein the heat source is a nuclear reactor pile.~~

~~14. The method of claim 9, wherein the continuous stream of pulses is at a first frequency and further including generating a signal at a second frequency greater than the first frequency using an oscillator circuit coupled to the conductor.~~

~~15~~12. The method of claim ~~9~~8, wherein the ~~conductor is a~~ tube~~, which~~ has fluid pumped therethrough ~~and the fluid receives the heat from the heat source~~.

13. The method of claim 12, further including applying thermal energy to the fluid.

~~16~~14. An apparatus for generating electrical energy, comprising:

a pulse generator to generate a continuous stream of electrical pulses having a first power; ~~and~~

a tube having a cavity thereinconductor coupled to the pulse generator, the conductor tube for providing electrical energy to a load, wherein the conductor is configured to receive heat from a heat source, and wherein the conductor is configured to cool in response to the continuous stream of electrical pulsescavity is filled with material having a permittivity or permeability greater than a vacuum or air; and.

an oscillator coupled in series with the tube, wherein the electrical pulses are at a first frequency and the oscillator generates pulses at a second frequency, greater than the first frequency.

1715. The apparatus of claim 1614, wherein the conductor is a tube is configured to receive the heat andthat is converted the heat into electrical energy having a second power, greater than the first power, to the load.

18. The apparatus of claim 17, further including an oscillator coupled in series with the tube, wherein the electrical pulses are at a first frequency and the oscillator generates pulses at a second frequency, greater than the first frequency.

1916. The apparatus of claim 1814, further including a thyristor coupled in series with the oscillator.

20. The apparatus of claim 16, wherein the continuous stream of electrical pulses is at a first frequency and further including generating a signal at a second frequency greater than the first frequency using an oscillator circuit coupled to the conductor.